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ABSTRACT

Recent applications of the strategic planning approach in colleges and universities and techniques necessary for its application are reviewed. In addition, the intellectual roots of strategic planning are traced, and strategic planning is defined and contrasted with long-range planning. It is suggested that strategic planning addresses the total institution and attempts to address the total environment. Five areas of the strategic planning process are identified: establishing the mission, role, and scope of the institution; analyzing data on the internal operations; analyzing data on the external environment; matching institutional mission and strengths in order to capitalize on opportunities for alternative formulations of policy; and choosing the strategies that are consistent with the institutions' values, are economically justifiable, are politically attainable, and are consistent with serving social needs. Among the most substantial modern roots of the concept of strategic planning, in chronological order of development, are the following: geopolitical theory; field theory; general system theory; transdisciplinary, management school policy studies; the concepts and technique of marketing; and the concepts of organizational effectiveness. Approaches to scanning environmental information include: tracking new ideas that appear in the higher education literature; using a cross-impact paradigm that integrates national trends, local trends, values, and institutional sectors; developing a probability-diffusion matrix for events and trends; force-field analysis; and using value profiles. A bibliography is appended. (SW)

Report 9 - 1981

# Strategic Planning, Management, and Decision Making

Robert G. Cope

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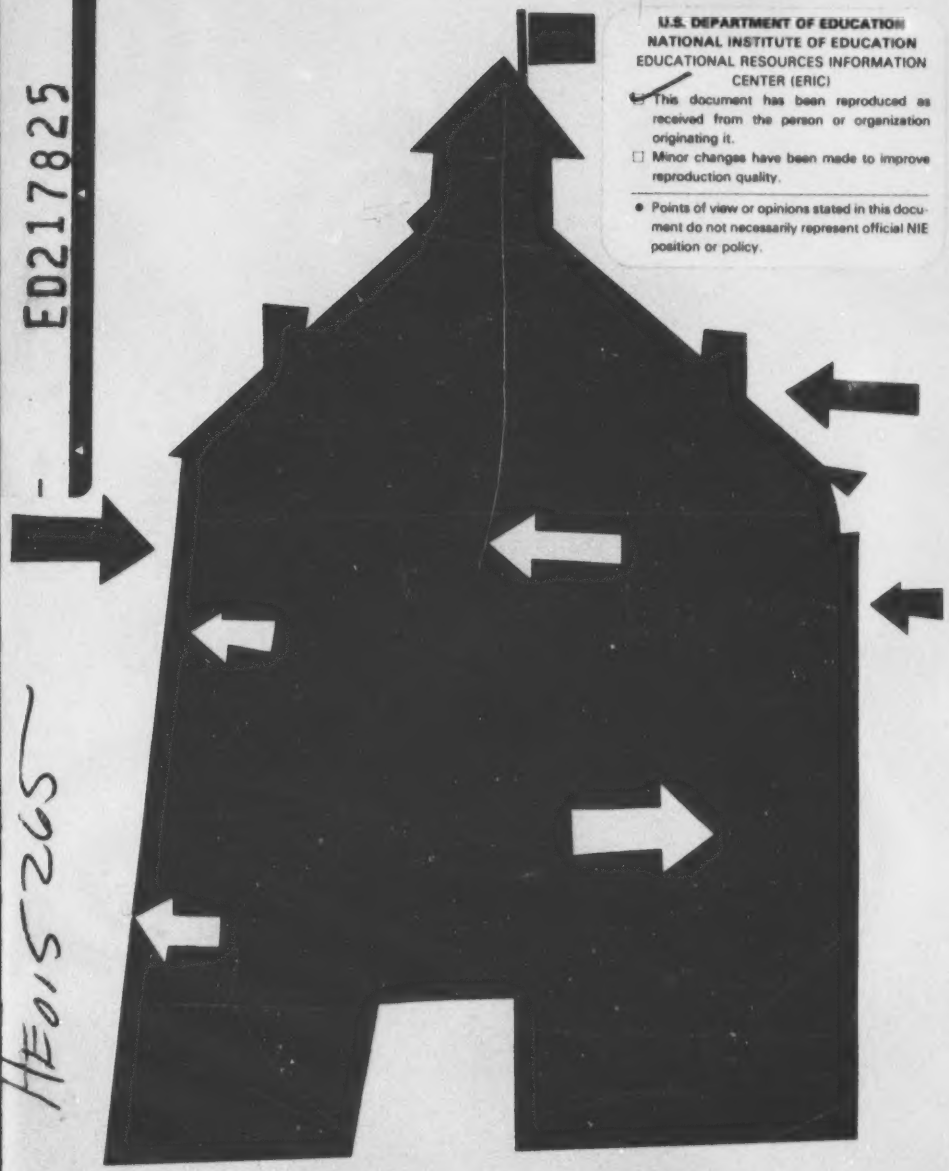



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# Strategic Planning, Management, And Decision Making

**Robert G. Cope**

**AAHE-ERIC/Higher Education Research Report No. 9, 1981**

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## Foreword

During the 1960s and 1970s, many institutions of higher education were involved in long-range planning activities, and in many cases, developed five- and ten-year institutional plans. Often these plans proved to be inaccurate because of rapidly changing events in the external environment. As a result many constituencies involved in decision making have developed an interest in a more dynamic approach to planning called strategic planning. The strategic view differs from the long-range approach in that its emphasis is on change rather than stability, and external factors rather than internal ones.

In this Research Report, Robert G. Cope, professor of higher education at the University of Washington, traces the intellectual development of strategic planning and outlines techniques that higher education institutions can use to adopt the strategic planning approach. Five areas of the strategic planning process are identified: establishing the mission, role, and scope of the institution; analyzing data on the internal operations; analyzing data on the external environment; matching institutional mission and strengths in order to capitalize on opportunities for alternative formulations of policy; and choosing the strategies that are consistent with the institution's values, are economically justifiable, are politically attainable, and are consistent with serving social needs.

As significant changes take place regarding federal funding levels, enrollments, and manpower requirements, strategic planning takes on added importance. Dr. Cope's analysis will greatly aid college and university administrators seeking to implement a strategic planning approach.

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**Robert G. Cope**

## Overview

This research report defines an illusive yet illuminating approach to planning widely known—mostly outside of higher education—as strategic planning. The report contrasts strategic planning with long-range planning, reveals the intellectual roots of strategic planning, summarizes its recent application in colleges and universities, and identifies the techniques necessary for its application.

### Strategic versus Long-Range Planning

Strategic planning, as one professional acquaintance said, "is what I do all the time, but I didn't know what to call it." Strategic planning has become important because it more accurately reflects the reality of institutional life in natural environments. Strategic planning differs substantially from what colleges and universities call planning, often long-range planning or comprehensive planning.

Long-range planning, for example, so popular in the 1960s, implicitly assumed a closed system, within which institutional five- and ten-year blueprints could be constructed. Strategic planning assumes an open system in which organizations are dynamic and constantly changing as they integrate information from turbulent environments. Long-range planning focused upon the final *blueprint*. Strategic planning focuses upon the *process*. Long-range planning, with its application of formulas, assumed rationality but was inadequate, as it gave too little attention to values, politics, and changed circumstances. Strategic planning is rational because it incorporates the reality of the irrational.

Long-range planning tended toward *internal* analysis, toward *quantitative* models of resource deployment, and toward being a *separate* institutional function. Strategic planning focuses on the *external* environment, on *qualitative* information and intuitive decisions regarding resource commitments, and on *integrated*, participatory involvement. "Long-range planning made decisions about the future based upon present data. Strategic planning uses current and future trends to make current, not future decisions" (Feeney 1981). Long-range planning emphasized the *science* of planning, management, and decision making, while the strategic view emphasizes creativity, innovativeness, and intuition—the *art* of planning, management, and decision making.

With strategic planning, the institution will not print, bind, and distribute long-range plans that are soon filed and appropriately forgotten; instead, there may only be annual reviews of the institution's and its departments' directions of movement. Less attention is given to computer models that project internal staffing requirements and internal resource requirements over the next, say, five years; instead, more attention is given to changes outside the institution in what people value, what political institutions seek, and what competing institutions are likely to do.

Long-range plans focused upon institutional goals and objectives five years from now; strategic planning asks what decision is appropriate today based upon an understanding of where the critical external variables will be five years from now.

Long-range planning was viewed largely as a science with detailed and interrelated sets of data, with aggregations of departmental plans, with extrapolations of current budgets. The techniques of strategic planning aim to inform intuitive and innovative individuals and groups about how to maneuver the institution over time and across turbulent waters.

Strategic planning is an institutionwide process that examines the future, resulting in statements of intention that synergistically match strengths with opportunities.

**The Intellectual Roots of Strategic Planning**

The ideas and techniques of the strategic view are developing from a convergence of several disciplines and subdisciplines. The clearest connection is with schools of management from which policy, marketing, and effectiveness research is being adapted for use in higher education. Policy research is aimed at determining the nature of the activity in which the organization is to engage and what kind of organization it is to be. Marketing helps determine more directly what the organization's current and probable clients want. Effectiveness research seeks to determine what combination of organizational policies and fulfillment of need results in success. The literature about policy, marketing, and effectiveness overlaps and converges in strategic planning. Nearly all of this literature has developed in the last 15 years in the management schools and has been applied to higher education for only about three years.

Before and during the development of the relationship to management schools, related concepts and techniques of analysis from geopolitical, organizational sociology, and general system theories were formulated. The geopolitical schools of analysis focus upon relations between nations and states, natural resources, and the course of human events over the surface of the earth. The organizational sociology literature forces an examination of group behavior within organizational settings. An attempt has been made to synthesize the social sciences through general systems theory, in which common relationships between disciplines are emphasized, especially as the general systems view helps frame issues and attempts to solve them. The principles of general systems theory are perhaps closest to those of strategic planning, as they provide links between specialized areas (e.g., geopolitical and sociological), resulting not only in a new conceptual framework but also in tools that can be used to analyze and make decisions in real-world settings.

Because strategic planning draws on a diverse and rich intellectual heritage, many who understand parts of that heritage see it as useful. Partial understanding, however, is insufficient. To claim to be a strategic planner with justification, individuals need to acquaint themselves with the techniques needed for successful strategic planning.

**The Elements of Strategic Planning**

Regardless of origins, it is clear that most of the existing concepts of strategic planning include the following characteristics:

1. It is usually seen as a primary function of chief executive officers (that view is not, however, advocated in this monograph).
2. Its perspective is of the organization or the subunit as a whole, involving decisions cutting across departments and functions.
3. It places great emphasis on the conditions of the environment, seeking to match institutional capabilities with environmental conditions to achieve goals.
4. It is an iterative, continuing, learning process.
5. It is more concerned with doing the right thing than with doing things right. It is more concerned with effectiveness than efficiency.
6. It seeks to maximize synergistic effects, i.e., making 2 + 2 = 5.
7. It seeks to answer the question, What is our mission, role, and scope, and what should be our mission, role, and scope? That is, what business are we in and what business should we be in?
8. It is concerned with the basic character of the organization, the core of special competence.
9. Its emphasis is on change, review, reexamination. It is not static.

**Six Techniques Necessary to Plan Strategically**

While the strategic approach is different, it does not require any particular change in current operations. Most techniques and skills are easily adapted to what we do in colleges and universities already. The most useful techniques include environmental scanning, marketing, review of missions and programs, selected group processes and cognitive skills, understanding measures of effectiveness, and adapting a planning model that integrates horizontal and vertical organization over time.

The essence of strategic planning is effectively relating the institution to its environment to ensure success. Success requires scanning the environment for changes in the social, economic, political, and technological realms. To know the environment also requires understanding contemporary marketing techniques.

Strategic planning requires knowing how to reexamine the institution's mission and how to review its programs. It requires some understanding of how the staff of the institution organizes its work and how people make strategic perceptions.

Strategic planners also need to know what they are working toward. What elements need to be brought together to ensure the success of the institution's mission? That requires an understanding of the elements of effectiveness. And finally, strategic planners need to be able to engage in a planning process that recognizes the interrelationship of three dimensions of planning: time, vertical integration (the relationship of different levels within the institution), and horizontal integration (the relationship of different functions within the institution).

All of this should convince the reader that strategic planning is common sense. It is indeed, but it is not simplistic. As Picasso brought an analytic quality to art with cubism, strategic planning brings an analytic quality to common sense. Both are, nevertheless, art forms.

Given the nature of higher education's many constituencies, from legislative to interest groups and from prospective students to trustees, and recognizing the existing permeable boundaries of most institutions, a new expression for college and university planning is proposed: *open-system planning*. Open-system planning recognizes the legitimate rights of many constituencies, is consistent with the present open boundaries of our institutions, and avoids the connotation of possible deception or trickery already associated with the words "strategy" and "strategic." Widespread, healthy involvement in planning is thereby furthered.

## The Concept of Strategy

The word "strategy" comes from a Greek noun and verb. The noun, *strategos*, "a general," in turn has roots meaning "army" and "lead." The Greek verb *stratego** means "to plan." Historically, the term strategy and its concept have been applied largely in the military and political contexts. (Bracker 1980), but the concept of strategic planning has been applied in highly mathematical ways in game theory to explain the economic behavior of organizations (Von Neumann and Morgenstern 1947) and in the simpler yet seminally important observations by organizational theorists such as Peter Drucker. According to Drucker, strategic planning does not stress *efficiency*, doing things well, but rather *effectiveness*, doing the right things (1974). It is different from long-range planning in that long-range planning "tries to optimize for tomorrow the trends of today. Strategy aims to exploit the new and different opportunities of tomorrow" (Drucker 1980, p. 61).

Strategic planning

> *refers to the formulation of basic organizational missions, purposes, and objectives; policies and program strategies to achieve them; and the methods needed to assure that strategies are implemented to achieve organizational ends (Steiner and Miner 1977).*

The concept of strategy is difficult to define yet can be understood intuitively. It is deceptively simple. It is basic rather than esoteric. Because it is common sense, it will not strike anyone as a profound revelation.

The apparent simplicity should not fool the user, however, because the gap between understanding and application is substantial. The successful strategist is one with the capacity to apply the concept, not simply to understand it (Uyterhoeven, Ackerman, and Rosenblum 1977).

Strategic planning is difficult to apply because it involves the conceptual capacity to see the institution as a whole. And seeing the whole is probably the most important skill of all for those in top management. Conceptual skill involves

> *recognizing how the various functions of the organization depend on one another, and how changes in any one part affect all the others; and . . . it extends to visualizing the relationship of the individual business to the industry, the community, and the political, social, and economic forces of the nation as a whole. Recognizing these relationships and perceiving the significant elements in any situation, the administrator should then be able to act in a way which advances the overall welfare of the total organization (Katz 1974, p. 26).*

*The author has enjoyed a board game named "Stratego," which was designed in Holland and made available in North America by the Milton Bradley Company, and recommends it for those who enjoy the strategic way of thinking, as it allows considerable innovativeness in formulating strategy yet is tight on workable tactics.

Drucker sees the formulation of strategy as a top management skill, as the "first task":

> *There is first, the task of thinking through the mission of the business, that is of asking the question "What is our business and what should it be?" This leads to the setting of objectives, the development of strategies and plans, and the making of today's decisions for tomorrow's results. This clearly can be done only by an organ of the business that can see the entire business; that can make decisions that affect the entire business; that can balance objectives and the needs of today against the needs of tomorrow; and that can allocate resources of men to key results (1974, p. 611).*

Strategic planning is different in kind as well, in that it requires a special way of thinking. The top manager's way of thinking is unique—no one else in the organization has the same perspective; understanding the functioning of a total organization does not merely extend the phenomena of simpler situations. Entirely new phenomena take place (Steiner and Miner 1977).

**Attributes of Strategic Planning**

Most concepts and applications of strategy include the following characteristics:

1. It is the primary function of the chief executive officers.
2. The perspective is of the organization or the subunit as a whole.
3. It places great emphasis on the conditions of the environment, seeking to match capabilities to environmental conditions to achieve mission.
4. It is an iterative, continuing process.
5. It is more concerned with "doing the right thing" than "doing things right."
6. It is more concerned with effectiveness than efficiency.
7. It seeks to maximize possible synergistic effects.
8. It seeks to answer the question, What is our mission, role, and scope, and what should be our mission, role, and scope?
9. It is concerned with the basic character of the organization, the core of special competence.

When the strategic view is contrasted with what has been called long-range planning—or comprehensive planning or master plans—one sees a substantial change in emphases (see Table 1). Understanding the differences in Table 1 is crucial for understanding strategic planning and for knowing how to apply the concept. The terms under "conventional long-range planning" and "strategic planning" emphasize the ends of continua; they should be thought of as leverage points.

For example, the perspective of conventional long-range planning is of

**Table 1: A Comparison of Orientations between Conventional Long-Range Planning and Strategic Planning**

| *Attribute* | *Conventional Long-Range Planning* | *Strategic Planning* |
|---|---|---|
| Perspective | Internal | External |
| System view | Closed | Open |
| Data | Quantitative | Quantitative |
| Function | Separate office | Participative integration |
| Process | Deductive | Inductive |
| Basis | Science | Art |
| Result | Blueprint | Process |
| Result | Plan | Stream of decisions |
| Result | Decisions for future | Today's decisions from future |

The ideas on which this table is built are based on Feeney (1981).

an institution's internal attributes, suggesting that it is the critical dimension, the critical leverage point, in planning. On the other hand, strategic planning gains important leverage by emphasizing what is external to the institution, that is, its environment. Similarly, the conventional approach tends to view the institution as having closed boundaries, to be self-contained, self-sufficient. Strategic planning emphasizes an institution's openness, the permeability of its boundaries, and the active interplay with other organizations. Conventional long-range planning emphasizes quantitative or hard data, while strategic planning emphasizes qualitative data. In the latter case, anticipated changes, personal preferences, biases, even rumors are given substantial importance in plans.

Long-range plans are often the printed product of an office of planning or an office of institutional research. The product of strategic planning is the shared understanding of the institution's purposes and a shared understanding of how resources will be allocated to achieve those purposes. Strategic planning gives substantial emphasis to the gestalt, to the whole view, to the concurrent pulling together of soft and hard data, of hunches and guesses, to arrive at major decisions that contain elements of timing, tone, texture, emphasis, rhythm, and contrast. The elements of art.

The result or outcome of conventional planning tends to be a lengthy document containing substantial detail about the institution's mission, degree programs, numbers of graduates and students by program, numbers of faculty, gross square footage in buildings and grounds, and general statements about what research, teaching, and service objectives would be achieved in five or ten years. The strategic view says the process is the most important outcome and that an institution's strategy will evolve through a series of today's decisions as they take identifiable patterns over time.

**A Definition for Higher Education**

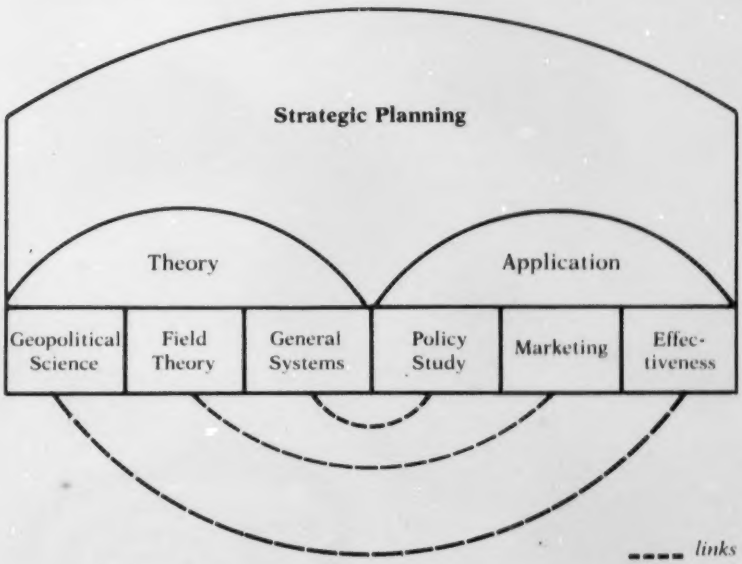
The following working definition is proposed for higher education as it builds upon the differences in Table 1 and upon the many elements already in most other definitions and as it employs terms more appropriate to academe than to industry:

> Strategic planning is an institutionwide, future-examining, participative process resulting in statements of institutional intention that synergistically match program strengths with opportunities to serve society.

Because strategic planning addresses the total institution and attempts to address the total environment, it draws upon a substantial literature. The intent of this monograph, rather than to review in general that literature, is to identify the major components of strategic thinking as illustrated in Figure 1, to explain as briefly as possible what concepts are important in those components and to point out a few of the major publications that explain a component in detail.

Figure 1 shows the overall role of strategic planning as it draws upon intellectual roots in the *basic* theories of geopolitical science, field theory, and general systems and the *applied* theories of policy study, marketing, and effectiveness developed largely in schools of business management.

**Figure 1: Overall Role of Strategic Planning**



## The Intellectual Roots of Strategic Planning

The concept of strategy appears to have grown from a number of intellectual bases that, like the distinctions in Table 1, are critical for understanding the concept yet are not usually acknowledged. Among the most substantial modern roots, in chronological order of development, are:

1. geopolitical theory
2. field theory
3. general systems theory
4. since World War II, the transdisciplinary, management school policy studies
5. the concepts and techniques of marketing, and
6. the concepts of organizational effectiveness.

Table 2 illustrates the primary fields of scholarship, identifying the disciplinary homes of the major theorists, key strategic concepts, and some of the as yet limited evidence as to the application of those disciplines and concepts in higher education.

**Geopolitical Theory**

While today's definitions of strategy come largely from current concepts of business management, business schools seldom acknowledge an intellectual debt to geopolitical analysis. It is clear, nevertheless, that the same principles are operating. The seminal works in geopolitical theory ask questions about the success of nations and states (Mahan 1890; Mackinder 1904) in the same way strategic planners for business today ask what elements of planning will make a firm profitable.

While they were not identified then as strategic thinking, Alfred Mahan's analysis of the six elements of British sea power and Halford Mackinder's analysis of pivotal land positions have served the global strategist well as they revealed the essentials, the roots, the principles of national strategic survival. Mahan's and Mackinder's propositions illustrate the nature of strategic thought processes and the elements of strategic planning.

Mahan's most celebrated work, *The Influence of Sea Power on History, 1660–1783*, traces the growth of maritime powers during the 17th and 18th centuries, reviewing in detail six elements (three natural, three human) necessary for nations of that time to achieve power. His basic question was, Why was Britain successful? National prosperity, he concluded, depended on three "natural conditions":

1. *Geographical position* is of prime importance. Mahan viewed Great Britain as being in a particularly favored position as an island. It need not defend itself by land or extend itself over land, thereby wasting resources in defense. Further, because of its position on favored sea lanes, it could easily engage in trade. In comparison, because they bordered on two great seas, France and the United States both needed to split their navies, depriving them of concentrated force. Although it was well positioned on sea lanes, Holland had too much land boundary to protect.

**Table 2: Intellectual/Disciplinary Roots of Strategic Planning**

| Field | Political Science/ Geography | Sociology | Biology/ Psychology/ Mathematics | Business Management | | |
|---|---|---|---|---|---|---|
| **Theory** | Geopolitical | Field | General Systems and Contingency | Policy | Marketing | Effectiveness |
| **General Theorists** | Mahan (1890)<br>Mackinder (1919) | Lewin (1951) | Bertalanffy (1955)<br>Ackoff (1960)<br>Katz and Kahn (1966)* | Andrews et al. (1965)<br>Ansoff (1965)<br>Mintzberg (1977)<br>Steiner (1979) | Kotler (1977) | Drucker (1974)<br>Steers (1977) |
| **Key Concepts** | Positioning<br>Resources | Vectors/Forces | Open System<br>Environment<br>Interaction<br>Adaptation | Definitions<br>Processes | Images<br>Competitive Advantage | Outcomes |
| **Examples of Application in Higher Education** | Cope (1981c) | Berg and Östergren (1977)<br>Collier (1981)<br>Mortorana and Kuhns (1975) | Orton and Dorr (1975)<br>Cleveland (1981)<br>Cope (1981c) | Cope (1978)<br>Hollowood (1979)<br>Shirley (1980/81)<br>Davies (1980) | Leister (1975)<br>Scigliano (1981a, 1981b, 1981c) | Cameron (1978, 1981)<br>HEMI (1981) |

*Chapters 2 and 3. The contingency approach to strategic planning is seen here as a subset of general systems theory. The "contingency theory," so labeled by its founders (Lawrence and Lorsch 1969), attempts to determine the best "fit," in an evolutionary sense, between the institution and its environment according to task requirements.

2. *The physical form* of the coast was an important factor; it was favorable if it offered access and thus promoted involvement with the world beyond.

> *. . . the easier the access offered by the frontier to the region beyond, and in this case the sea, the greater will be the tendency of a people toward intercourse with the rest of the world by it. . . . Numerous and deep harbors are a source of strength and wealth, and doubly so if they are the outlets of navigable streams, which facilitate the concentration in them of a country's trade . . . (Mahan 1890, p. 35).*

3. The third natural factor was the extent of *territory in coastline* (defined as navigable waterways) and the proportion of people living along the coastline. Using the South during the Civil War for example, he pointed to the comparative lack of people living along the otherwise excellent stretches of coast with fine harbor facilities.

In addition to these natural conditions, Mahan asserted that three conditions of people and government also had to be present:

4. *Number of people* and their *proclivity to go to sea* was a first condition for success. The French, for example, were not inclined to sea because the country is agricultural. The English, on the other hand, had more of a maritime and commercial orientation.

5. Mahan noted that an *aptitude for commercial pursuits* was a distinguishing feature of nations that have become "great upon the sea." He saw both the English and the Dutch as nations of shopkeepers, while the Spanish and the Portuguese were seen simply as gold seekers. They created nothing of permanence for exchange.

6. *A favorable attitude of government* toward the growth of sea commerce and the manufacturing of goods for trade was necessary.

> *The government by its policy can favor the natural growth of a people's industries and its tendencies to seek adventure and gain by way of the sea; or it can try to develop such industries and such seagoing bent, when they do not exist; or on the other hand, the government may by mistaken action check and fetter the progress which the people left to themselves would make (Mahan 1890, p. 82).*

Mahan saw the struggles of the national powers during the 17th and 18th centuries as a contest for control of the sea. The reason for considering Mahan again today is to suggest that his six elements, broadly conceived, serve contemporary, strategic management thinking well. Modern organizations—like Great Britain—have geographical position, boundaries, zones of commitment, numbers of employees, with varying "company" characteristics, and are managed by organizations with more or less favorable attitudes toward the use of the other elements. His six elements may be said to be linked closely to the root explanation of any entity's success or failure in its environment. As such, his strategic principles likely have

enduring value, even when they are not applied to nation-states. His theory and Mackinder's views serve to integrate geopolitical thinking with modern organizational theories of effectiveness (Cope 1981c).

Mackinder's paper is still regarded as the foundation for the modern science of geopolitics. Only 24 pages long, it is considered a remarkable analysis of the link between geography and politics. He observed that after approximately 400 years of exploration and expansion, the outline of the map of the world had essentially been completed. He saw the passing of the frontier, and the beginning of a "closed" political system that would be worldwide in scope. Already at the turn of the century he saw that every "explosion" could be felt worldwide. *The* question of his time became, Where is the *natural center* of the new epoch—the pivot area?

The pivotal point of land, according to Mackinder, was the "World Island" of Central Eurasia, comprising two-thirds of the land mass and seven-eighths of the world population. Within the World Island, the key point, the geographical pivot, was the land area occupied by the Soviet Union.

> *The actual balance of political power at any given time is, of course, the product on one hand of geographical conditions, both economic and strategic, and, on the other hand, of the relative number, virility, equipment and organization of competing peoples. . . . The geographical quantities in the calculation are more measurable and more nearly constant than the human (Mackinder 1904, p. 24).*

Mackinder's vision, when compared with Mahan's, indicates not only the effect of new developments (railroads, in his case) but also the passing of an epoch. In our time, especially since World War II, higher education has seen a golden era of expansion, when resource-requirement-prediction planning was important, to the present era of economic plateaus and environmental instability, where it is suggested that position (rather than growth) is paramount.

The literature of higher education seems to contain only a minimum of *explicit* application of geopolitical thinking, although some obvious examples are practiced—academic reviews focusing on the centrality of programs in universities and the creation of new programs in community colleges, for example. The first instance is parallel to the availability of deep, well positioned harbors, while the latter is comparable to the creation of new products for trade. An aptitude for commercial pursuits translates into an orientation to develop new forms of scholarship, to offer new courses, to seek funds for advanced, ground-breaking research, and so on. The most relevant application for higher education today is that emphasis on new forms of scholarship is essential for an institution's vitality.

**Field Theory in the Social Sciences**

Because of the importance of forces in the environment, especially as forces cause organizations to change or restrict change, strategic planning ben-

efited next from Kurt Lewin's field theories. Lewin (1951) saw the futility of determining causal relationships by isolating elements within social situations. He first saw the importance of looking at the organizational entity in its setting in relationship with other entities. Field theory approaches a problem or characterizes a situation as a whole, later performing more specific analyses. The subject group could be embedded in an organization (a department) or the organization itself; thus, field theory is at the same time inter- and intraorganizational.

> *The basic tool for the analysis of group life is the representation of the group and its setting as a "social field." This means that the social happening is viewed as occurring in, and being the result of, a totality of coexisting social entities, such as groups, subgroups, members, barriers, channels of communication, etc. One of the fundamental characteristics of this field is the relative position of entities, which are parts of the field. This relative position represents the structure of the group and its ecological setting. It expresses also the basic possibilities and locomotion within the field. What happens within such a field depends upon the distribution of forces throughout the field (Lewin 1951, pp. 200–201).*

Field theory saw entities occupying positions and changing positions in a space occupied by other self-actualizing entities, each creating forces. The contemporary language of strategic planning refers to market positioning, competition for resources, and force field analysis. Despite these links with strategic planning, little evidence exists that today's strategic planners directly acknowledge their debt to Lewin, however (see Bennis 1966, 1980; Emery 1969; Pfeffer 1973; and Elton 1979). Pfeffer (1973), for example, acknowledged the importance of understanding embedded organizational levels (technical and managerial) because of their roles in production and coordination (Lewin's concern). Pfeffer was among the early social scientists to see the emerging importance of analysis of institutions because the various parts of the institution were all involved in the organization's legitimacy, credibility, and success in coping with its turbulent environment. Even though he assumed a placid environment Lewin's influence is still seen in the effectiveness approach to business management (see also Mortorana and Kuhns 1975; Berg and Östergren 1977; and Cameron 1978).

**General Systems and Contingency Theory**

Because general systems theory, as a discipline, is concerned with the general properties and causal effects of systems, it is perhaps closest to the essence of strategic planning. Strategic planning is largely an *application* of general systems concepts to a particular property: an organization in an interactive, legal, economic, and social environment. Although it may be premature to call strategic planning a discipline (Wagner 1980), it appears that most of the theory of strategic planning, including contingency theory and the approaches of general business management, is working toward that discovery of a new discipline.

General systems theory concerns itself with the omnipresent features of the biological, behavioral, and sociological fields in multivariable interaction (cf. Bertalanffy 1967) in contrast with the social and behavioral sciences, which tend toward highly specialized issues. While specialization may be useful in addressing issues unique to particular subjects, the approach does tend to obscure relationships between disciplines.

Contingency theory is a restatement of general systems theory applied specifically to management. Representative of attempts to integrate elements of contingency theory are those of Lawrence and Lorsch (1969), Kast and Rosenzweig (1974), and Luthans and Stewart (1977).

> *The contingency view of organizations and their management suggests that an organization is a system composed of subsystems and delineated by identifiable boundaries from its environmental suprasystem. The contingency view seeks to understand the interrelationships within and among subsystems as well as between the organization and its environment and to define patterns of relationships or configurations of variables. It emphasizes the multivariate nature of organizations and attempts to understand how organizations operate under varying conditions and in specific circumstances. Contingency views are ultimately directed toward suggesting organizational designs and managerial actions most appropriate for specific situations (Kast and Rosenzweig 1974, p. ix).*

The conceptualizations in contingency theory have been toward the identification and description of the major contingency variables upon which managerial behavior depends. Studies by Orton and Dorr (1975), Miller and Friesen (1978), and Cleveland (1981) represent efforts to develop a limited number of strategy-making models based on relationships among selected major environmental, organizational, and individual variables. The contingency approach posits that there are no universal principles because everything depends upon how environments are perceived. Consequently, as the ways managers perceive are different and as each institution exists in somewhat different environments, contingency theory suggests the importance of uniquely designed responses (plans). Because systems theory and contingency theory are in the early stages of development, the literature is not extensive.

**Three Transdisciplinary Management School Approaches**

Modern strategic planning systems were applied in large corporations in the mid-1950s. Soon afterward, business policy courses and business policy research, based upon strategic planning, started in leading schools of management. Subsequently, marketing adopted the strategic concept, so now business policy and marketing appear to draw on many of the same techniques. And a third form of scholarship—again mostly found in schools of management—is emerging: effectiveness research. It asks the questions, Which organization is more effective, organization A or B? and What are the criteria by which organizational effectiveness can be measured?

**Business policy approach.** It is widely conceded that the general business policy approach of management schools to the development, elaboration, and refinement of strategic planning has occurred in the last 15 or so years. Even though it was not then called strategic planning, Peter Drucker (1954) was probably the first to address the issue of strategy with his questions, What is our business? and What should it be? Strategy was first defined as "the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out those goals" (Chandler 1962, p. 13).

Soon afterward, Kenneth Andrews and Igor Ansoff focused specifically on the concept of strategy and related processes. Andrews et al. (1965) linked Drucker's and Chandler's ideas in a new definition of strategy:

> *strategy is the pattern of objectives, purposes or goals and major policies and plans for achieving these goals, stated in such a way as to define what business the company is in or is to be in and the kind of company it is or is to be (p. 36).*

Ansoff, at roughly the same time, wrote of strategy as a rule for making decisions determined by product/market scope, growth sector, competitive advantage, and synergy. Since Andrews and Ansoff, many have written about strategic planning. Major writers—those who contribute to the strategy regularly and are widely quoted—include Steiner (1969, 1979), Steiner and Miner (1977), Mintzberg (1973a, 1973b, 1976, 1977, 1979), Ackoff (1970, 1974), Hofer (1975, 1976), and Hofer and Schendel (1978).

Although authors use different labels, Cleveland (1981) distinguished five distinct organizational and/or individual approaches to the formulation of strategy policy in the literature: (1) planning, (2) adaptive, (3) directional, (4) entrepreneurial, and (5) intuitive.

The planning approach is most commonly recommended. It tends to be formal, structured, systematic, and analytic, and it strives for rationality. This form of strategic planning is designed essentially at one time; all major decisions are integrated. As with conventional long-range planning, this form of planning generally results in a set of plans containing quantifiable goals and objectives.

The adaptive form of planning has been referred to as "the science of muddling through" or as "disjointed incrementalism." As a consequence of complex divisions of power, some types of organizations (higher education in particular) negotiate a wide array of goals, spelled out in general terms. Directional planning is an approach without goals in which the strategy maker identifies a domain and a direction only. The plans are seldom explicit.

The enterpreneurial approach is dominated by a continuous search for new opportunities. Power is often centralized. Growth is the dominant goal.

The intuitive approach contains elements of both directional and en-

trepreneurial planning. A substantial portion of the writers on decision making allow for the importance of "hunch," "guess," and "feel" in decisions. They also recognize that intuition is the result of reflectively digesting masses of information and integrating it with past experience.

Despite the variety of approaches, the major disagreements in the literature of business policy are largely over whether strategy should be defined broadly or narrowly. About half the authors, following the approach of the Harvard Business School, opt for the broader definition that strategy defines the nature of what the organization is or is to become. Other authors focus on narrower dimensions, such as rate of growth, markets and market segments, competitive advantage. As both sides readily acknowledge the value of the other approach, the disagreement is largely a matter of quibbling, except when the zone of disagreement is over the domain identified as marketing. Marketing is seen as an important part of strategic planning, yet because there is a substantial, nearly separate literature, marketing may be considered to have a nearly separable disciplinary base.

**Marketing approach.** The 1970s saw the development of a newer type of marketing research. Although it still relied upon some of the traditional demographic variables such as age and population number and density, changes in cultural values, in the mass media, a great expansion in the number of products, and more mobile, educated, and sophisticated consumers have resulted in an increasingly complex marketplace and the increased application of interdisciplinary concepts (Enis 1973). This phenomenon is particularly true in economic sectors where there is heavy competition, little differentiation in products, and many brand names—for example, higher education.

The newer approaches, instead of demographics, rely more on attitude research, human perception, and human preferences. "[T]he more sophisticated the product and purchaser and the more complex the marketplace, the less adequate the traditional approach, and the more helpful the attitudinal approach" (Leister 1975, p. 384). The following view is appropriate today:

> *In application to the administration of higher education, marketing is an approach or "philosophy" of management and planning based on the conviction that those institutions that survive respond to basic needs felt by members of the population the organization seeks to interact with, its markets. Markets are the subgroups of the publics an institution has. . . . College and university administrators who employ marketing concepts recognize that the survival of an institution depends on the identification and fulfillment of the needs of their chosen clientele in a manner consistent with the educational purpose of the institution (Trivett 1978, pp. 2–3).*

It seems clear that business policy analysis and marketing are converging. One indication is the development of a marketing instrument

with a category directly related to strategic planning (Kotler 1977). One of the few empirical studies of strategic planning in higher education relies directly on Kotler's work (Scigliano 1981c), and another is indirectly influenced (Leister 1975).

**Effectiveness approach.** Strategic planning, management, and decision making should *result* in plans, priorities, and tactics, ensuring effectiveness (Drucker 1974). The major problem in this approach is that of establishing effectiveness according to a specific criterion—e.g., accomplishment of goals (Georgopolous and Tannenbaum 1957), acquisition of resources (Yuchtman and Seashore 1967), health of the organization (Argyris 1964), satisfaction of participants (Keeley 1978). Cameron (1980) discusses the problems and potential of these four sets of criteria.

The most studied approach is the *goal model* of effectiveness, which was exemplified in particular during the era of MBO (management by objective). An example is a plan to increase enrollments by 400 students by 1985. A *system resource* approach focuses upon the entity's capacity to acquire valued and, because of competition, scarce resources. An example is to increase the general fund account annually at a rate of two percent over inflation. Cameron (1981), following Molnar and Rogers (1976), suggests resource acquisition approaches may be inappropriate because in the nonprofit sector the production of outputs cannot be tied to resources (input).

The *organizational health* model stresses smoothly operating, highly efficient internal processes (Bennis 1966; Likert 1967). An example is providing for the institution's continuance of democratic governance. Finally, the *participant satisfaction* model stresses the satisfaction of internal and external constituencies as the vital dimension ensuring effectiveness. An example is the maintenance of a high level of job satisfaction among employees. Miles (1980) and Steers (1977), when employing "macro" or "ecological" perspectives, see employee or client satisfaction as a potential summary measure of overall effectiveness, incorporating some of the variables from the goal accomplishment, resource acquisition, and organizational health approaches.

At present, the approaches to institutional effectiveness are not clearly conceptualized, and because all of the criteria influence some aspect of an organization's effectiveness, no set of agreed upon outcomes is considered definitive. Except for the very recent attention given to Theory Z (Ouchi 1981), it is clear that effectiveness literature is shifting from a focus on *internal* organizational behavior (Argyris 1964; Schein and Bennis 1965; Mott 1972) to *externally* oriented behavior (Hirsch 1975; Steers 1977), which is consistent with a growing attention to the demands made by environments.

**Summary**

Strategic thinkers need to understand the disciplinary origins of certain key concepts: from the geopolitical sciences, the importance of positioning

resources; from field theory in sociology, the importance of vectoring forces; from general systems theory of the natural sciences and mathematics, the importance of open adaptive interaction with the environment. From the teaching and research originating in schools of business management come other key concepts that are less based on theory: from management policy, definitions of the bounds of strategic planning and of processes necessary to implement a strategic planning system; from modern marketing, techniques for determining customers' needs and analyses of comparative capacity to satisfy those needs; from studies of organizational effectiveness, guidelines on what makes an organization successful. Together the basic and applied disciplines provide the intellectual roots and techniques necessary for strategic planning. Some of this approach to planning is evident in higher education.

## Applying Strategic Planning to Higher Education

Is strategic planning consistent with the values of academe? While no particular answer would satisfy everyone, a growing number of articles and books suggest that these largely business-developed and business-oriented decision and management techniques can be adapted for use in colleges and universities.

Many of the related techniques are already in use (Cope 1981b; Collier 1980, 1981; Millett 1977, 1978). Essential characteristics of business-oriented and not-for-profit organizations make the concept feasible for both: the need to interact effectively with the environment, including the requirements to secure funds to carry out the institution's mission and to satisfy the needs of customers, and the need to establish mission, role, and scope and to set goals.

Substantial differences remain as well. Colleges have many objectives and consensus on priorities is generally lacking. The decision making in colleges is different in some regards as well: (1) political considerations may dominate; (2) decision making is more likely incremental; (3) latitude in policy may be narrower; (4) qualitative evaluative tools are blunter; and (5) participative decision making among professionals is the likely norm. The constituents are broader, with many interest groups trying to influence decisions. Lines of authority are less clearly defined.

These characteristics may lead some to believe that it is impossible to plan strategically. Cohen and March (1974), for example, see the university as in a state of organized anarchy.

> *In a university anarchy each individual in the university is seen as making autonomous decisions. Teachers decide if, when, and what to teach. Students decide if, when, and what to learn. Legislators and donors decide if, when, and what to support. Neither coordination . . . nor control are practiced. . . . The "decisions" of the system are a consequence produced by the system but intended by no one and controlled by no one (pp. 33–34).*

The value of planning for colleges has been questioned more directly:

> *The planning cultists tell us that if we can generate enough statistics, manufacture enough planning documents, and hold enough workshops we can somehow eliminate the uncertainty. . . . They suggest that with PERT charts, Programming, Planning and Budgeting Strategies, and Strategic Planning, they can chart out the future . . . much of the noise and smoke about planning is simply unnecessary. The planners have been guilty of the sin that afflicts most other salesmen: they over-promise and under-deliver. Frankly, most plans don't work very well: predictions are wrong, actions don't solve the problems they are supposed to, and the necessary political consensus falls apart into squabbling among special interest groups (Baldridge 1981, p. 3).*

While they may be difficult in higher education, strategic planning and

decision making have benefits. Used wisely, strategic planning will aid in the formulation of crucial issues, serve as a guide to diverse operating and administrative functions, force a greater awareness of changes in external, environmental forces, and should help develop a way of thinking that broadly takes into account the institution's mission, its particular capabilities, and its opportunities in the environment. And while strategic planning may appear as something new to higher education, it isn't. Strategic planning is policy determination. John Millett's statement on what he calls policy planning captures most of the concept:

> *I am disposed to think of policy planning as the resolution of the major issues entailing value judgments, major issues of social goals, and the proper means for achieving the desired goals. Policy planning is also concerned with how to obtain the economic resources with which to pursue desired goals, and the setting of priorities among goals (1974, p. 57).*

Strategic planning emphasizes in an economic sense the position of resources—fiscal, human, physical, and intellectual—so as to maximize opportunities in the institution's environment: Strategic planning is the analysis of opportunity but not opportunism. Strategic policy decisions, for example, concern:

1. the choice of mission, goals, and objectives
2. the decision on organizational structure
3. the acquisition of major facilities
4. the decision to start new majors/degrees or drop existing ones
5. the establishment of policies or strategies relating to academic programs, support services, personnel, facilities, and financing
6. the allocation of gross resources (budgeting) to organizational units and programs.

Strategic planning sets an institution's movement in a direction of travel. Most institutions classify as planning, activities like scheduling classes, assigning faculty members to classes, scheduling rooms, controlling student registration, implementing admissions rules, scheduling and assigning staff members, formulating and controlling detailed budgets, planning and controlling personnel levels, determining curriculum changes, hiring faculty and staff members, and measuring, appraising, and improving professional performance. Such activities would be better termed "operations management" or "organizational development" or "operational control." They help the institution move in a strategically determined direction but are not, in themselves, components of a strategic plan.

**A Recent History**

The higher education community has been slow to recognize the possibility of using the concepts of strategic planning. Schendel and Hatten

(1972) appear to be the first American authors to state that strategic planning could be used in higher education; Schendel continues to contribute to the literature (Hofer and Schendel 1978). Other authors who have contributed include Orton and Dorr (1975)—recommending that strategic planning be used in higher education—Doyle and Lynch (1976), and Ellison (1977)—publishing an account of how strategic planning is actually used in an American institution. In the last few years, a steady outpouring of papers, articles, monographs, and at least two books (Cope 1978; Hosmer 1978) have related strategic planning directly to higher education. It appears that every current author has a background in business management or draws upon the business literature.

In addition to the growing literature, at least two organizations are making an effort to develop the concept further. The National Center for Higher Education Management Systems (NCHEMS) probably has the most visible program of research, development, and workshops (Carter 1980; Collier 1981; Shirley 1980–81). Cameron (1978, 1981) will soon contribute more to NCHEMS' research efforts. Secondly, the staff of the Resource Center for Planned Change at the American Association of State Colleges and Universities, in cooperation with participating colleges, has developed a ten-stage, institutionwide planning process that emphasizes environmental trends and links the trends to evaluated policies. While the Center has not explicitly highlighted the language of strategic planning, it is clear that fundamental concepts, particularly environmental scanning, are systematically employed (Alm, Buhler-Miko, and Smith 1978; Buhler-Miko 1981).*

Other organizations that have begun to show some interest in promoting the concepts of strategic planning include the American Association for Higher Education, which has sponsored issue caucuses at annual meetings, and the American Council on Education's Higher Education Management Institute, which offers training materials on the topic.

Because the concepts upon which strategic planning is based transcend disciplines, sometimes the significant literature does not include the term per se; nevertheless, most of the concepts are present (see, for example, Balderston 1974; Richman and Farmer 1974; Baldridge and Deal 1975; and Baldridge et al. 1978). Both explicit and implicit links between strategic planning and higher education are present in the literature.

**Explicit Links Between Strategic Planning and Higher Education**

Schendel and Hatten (1972) proposed the first direct application of strategic planning to higher education; its central idea is still at the heart of understanding the concept today: "Strategic planning is adaptive planning and suited to coping with changes; long-range planning is inertial and implicitly assumes a future that will duplicate the past" (p. 207).

*The consulting firm of Arthur D. Little had a significant development program underway for at least two years, but the program's principal (James Hollowood) left the firm, so that activity seems to have ceased.

Higher education's slowness to adopt the concept is not easy to explain. Perhaps it is related to too much emphasis on an inward view. All of the early (fewer than a half dozen) articles in the first six years since Schendel and Hatten's proposal were written essentially to promote a new idea. It was not until 1978 that the first attempt at a comprehensive treatment appeared in a small book with two purposes: to advocate strategic planning for higher education and to illustrate how to do it (Cope 1978). The book is essentially an adaptation of the Harvard Business School approach. It stresses creativity, planning as an art form, and the role of the president.

Hosmer's *Academic Strategy* (1978) is a detailed account of the strategic patterns emerging during the development of three business schools (Manchester, York, and Vanderbilt). It is not a how-to book but rather an exploration of the differences between initial stated plans and patterns emerging over time. The results of the study (a Harvard Business School dissertation) are framed as advice for more effective strategic academic management. Selected prescriptions include the need to (1) clearly understand the school's history, (2) know the environment, (3) relate school structure and programs to strategic emphases, and (4) achieve a tighter interrelationship among programs.

Since 1978 the number of publications and their sophistication have increased rapidly, yet most have the biases of the Harvard Business School built into them, as the proponents are either followers of that system of beliefs (e.g., Cope) or graduates of Harvard (Hosmer and Hollowood). The primary bias is one away from justifying strategic decisions on the basis of quantified data. Rather, strategic decisions are experientially based and are largely acknowledged to be guided judgments, almost hunches. Hollowood is the first from the Harvard school to offer a comprehensive process for strategic planning within an adequate analytic framework (1979).

Hollowood's approach has two advantages: (1) it draws upon accepted, general theories of organization and administration, and (2) it consists of independent components that are separable for the purposes of research and decision making. Although work on the approach has ceased, it is nevertheless useful to identify some of Hollowood's concepts:

1. strategic centers within the institution having separate or similar clientele to serve (cf. Ball 1978; Collier 1980)
2. market segmentation through clearly identified groups of clientele linked to the strategic centers (or "natural businesses," as the centers may be called)
3. resource vector fields for assessing direction in force fields (cf. Lewin 1951)
4. niches (cf. Leister 1975)
5. a common planning language useful throughout the institution.

In 1979 Horner introduced an important dimension more appropriate

to higher education than the earlier business-oriented ideas: political feasibility. He discounted direct transfer from business practice, which emphasized economic opportunities, emphasizing instead political dimensions that he knew were more likely to dominate strategic feasibility in the public sector. Horner recognized political reality by emphasizing the need to test any potential opportunity in three ways before strategically important decisions were made: tests for hierarchical position, power, and salience. The *position* of each individual or group with respect to each opportunity needs to be examined—for example, Are the trustees favorable or neutral? The test of *power* represents an estimate of the individual's or group's ability to affect the opportunity either positively or negatively. The test of *salience* determines the importance or relevance of each opportunity. Based on the combined analysis of position, power, and salience, the political feasibility of each opportunity can be assessed.

Other writings deserve mention because they contain a particular approach. Green, Nayyar, and Ruch (1979) offer an integrated system linking planning and budgeting. The underlying concepts of this work, contrary to most other approaches, have little to do with general management theory; principles of budgeting, including zero-based budget analysis and management by objective, are its cornerstone. While the work sees mission statements as useful and contains many examples of budgetary analysis, for the most part the content is a narrower, "business office" approach to strategy.

Merson and Qualls (1979), like Green, Nayyar, and Ruch, emphasize financial analysis in their approach to strategy, including formats for collecting and analyzing financial data. Neither treatment adequately considers the environment and thus is less than "strategic," and neither builds explicitly on the literature of strategic planning, but both have a more strategic orientation than that of the National Association of College and University Business Officers (NACUBO) or of Parekh (1975). The latter approaches are perhaps the least sensitive to the environment.

Collier's statement (1981) on how strategic planning is applicable to colleges and universities develops five elements from an analysis of the many definitions of strategic planning. He suggests that these elements make up the essence of strategic planning:

1. Strategic planning is the making of a set of future-determining decisions for the institution.
2. The total process is composed of both the formulation and implementation of strategy.
3. Strategy decisions require matching the organization's particular characteristics and resources with its proximate environment.
4. Strategic planning requires the institution to create its own futures.
5. The set of decisions should be synergistic and should increase organizational flexibility.

Collier also notes that awareness of the institution's culture or saga

gives those within an institution a sense of what to do and how to behave, as well as a sense of the unified set of beliefs that must be appropriately matched as strategic plans are formulated (cf. Clark 1972).

**Implicit Concepts in the Literature of Higher Education**

While not claiming to be about strategic planning, books by Balderston (1974), Richman and Farmer (1974), and Jedamus, Peterson, and Associates (1980) all present concepts useful to strategic planners and some specific techniques. While Balderston's background is economics and management, his angle of vision is clearly oriented toward the strategic and quite appropriate to higher education, especially in his illustration of the importance of constituencies and zones of commitment. Perhaps his use of the phrase "policy analysis"—because he *is* discussing "strategic policy"—is even more appropriate to higher education.

The special importance of Balderston's and of Richman and Farmer's books is that they provide many, and still perhaps the best, examples of strategic policy decisions at identifiable institutions: the merger of the Case Institute of Technology and Western Reserve University (Balderston 1974, p. 115); the closing of the graduate program in Slavic languages and literature at Princeton (Balderston 1974, pp. 112–14); the development of goals of Berea College (Richman and Farmer 1974, pp. 128–35); and the case of an unnamed university in crisis (Richman and Farmer 1974, pp. 36–71). Both books, further, approach planning and management in terms of open systems or contingencies, thus clearly relating their ideas on management to environments and internal program assessment. Continual, if gradual, directional transformations are the central concern of strategic management, and these authors make this point effectively.

The integration of institutional research with planning is the focus of Jedamus, Peterson, and Associates (1980). The book investigates quite thoroughly the full range of management activities in clearly strategic terms. The first three parts in particular lay out the conceptual basis for integrating strategic and tactical management: part 1 discusses exploring the external environment; part 2 links the institution to the environment; and part 3 focuses upon internally oriented planning, identifying and separating the strategic decision from the merely tactical. Too often every decision is called "strategic" because the term sounds important, but even "important" or "significant" decisions are not necessarily strategic.

Shirley (1981b) has developed the best set of criteria for separating the strategic from the merely tactical decision. He suggests that strategic decisions must (1) be directed toward defining the institution's relationship with its environment, (2) affect the organization as a whole, (3) be multifunctional in character, i.e., depend on input from a variety of functional areas, and (4) provide direction for and constraints on all administrative and operational activities throughout the institution (pp. 10–12).

**The Application of Empirical Research for the Strategic Planner**

A study that is particularly useful in understanding the notion of market

position or niche, one of strategic planning's central dimensions, is that by Leister (1975). Building on marketing studies of human perception and product preferences, he measured the perceived market position, or comparative image, held by potential students of 12 postsecondary institutions in the Puget Sound region of Washington. The institutional dimensions he measured included quality, quantity of offerings, costs, nearness, size, and safety.

> *Once the relative positions of products in a market are understood, either of two basic strategies underlying the product positioning concept can be employed: (1) change or reinforce (clarify) a product's present position in the perceptual space or (2) change the dimensions upon which people evaluate products in the space (e.g., add a new dimension to the space) (p. 395).*

The major policy decision for some institutions to change from single-sex to coeducation in the 1960s reminds strategists to carefully consider the intended—as well as the unintended—consequences of a major strategic move. Women's colleges that admitted men experienced significant declines in elements of campus climate in the areas that marked those colleges as distinctive (sense of community, propriety, and morale), while "the reciprocal change in male colleges was, almost without exception an unqualified success. Not only did enrollments increase and colleges' resources grow, but morale improved and the campus environment became more friendly and well-mannered." (Anderson 1978, p. 44).

Scigliano (1981a) tested a model (Kotler 1977) that relates environmental factors (competition and population changes) to planning and marketing activities in his study of the relationship between declining and growing colleges and selected administrative behaviors (capacity to take a total systems view, use of quality marketing strategies, among others). His sample consisted of 162 community colleges; data were obtained from admissions officers. This study illustrates that environmental conditions can affect administrative behaviors as well as the administrative structure of institutions.

Probably the best example of strategy research, because it blends the rigor of quantification with a complex set of field-related variables, is by Cleveland (1981). She studied the strategic decisions made by deans, chairpersons, and faculty in university schools of nursing. Her configuration of variables included (1) degrees of environmental uncertainty, (2) the cognitive styles of decision makers, and (3) the organizational position of the decision makers. She found decision makers' preferred styles were related to degrees of uncertainty in the decision makers' environments. For example, with higher levels of uncertainty in the environment, the respondents chose more analytic approaches to the formulation of strategy. With low levels of uncertainty, they chose integrated approaches to making strategy. She did not find position (level of responsibility) was related to their choice of strategy. At one point she concluded:

*[T]his study suggests that all members of an organization have strategy-making potential; it is not position related. In fact, since individuals seem to approach strategy formulation in different ways, it may be advantageous to the organization to involve persons with differing preferred cognitive modes and differing approaches to strategy making in the strategy process so as to benefit from a synthesis of the varying perspectives. . . . [A]n integrated approach to strategy making may be best under most circumstances; it combines the best of both worlds. Mintzberg (1976) proposes that the truly outstanding strategists are those who can couple nonanalytic processes (hunch, judgment, synthesis, and so on) with effective analytic processes (logic, analysis, articulateness, and so on).*

*Colleges and universities could particularly utilize the results of this study in better implementing collegial governance. Since position does not seem to affect the approach taken to strategy formulation, faculty, department chairpersons, deans, and others have the potential for contributing to the strategy process. In fact, the contributions of their differing perspectives would probably enhance the university's resulting strategies. In addition, by participating in strategy-making processes, the various members of the university community should be able to help facilitate adaptation of the university to changing circumstances and to newly identified opportunities. This advantage, however, could be realized only if the faculty, department chairs, and others were capable of looking beyond the narrow limits of their own disciplines (pp. 162–63).*

**Needed Research**

Little empirical research is available now and, considering the difficulty of studying real behavior in real colleges, little more is expected soon. Yet the field should not be neglected. Part of the problem may be the expectation in universities that research must demonstrate quantitative methodological elegance. Good policy research is, however, less rigorous but richer in its encompassing more qualitative variables. Mintzberg observes that

*. . . management policy is not yet ready for the hypothesis-testing of deductive research, since hypotheses are lacking, and it is not the single relationships that need to be studied so much as the systems of relationships, or* configurations, *among clusters of variables. . . . First, the field needs theory that is useful, rich, simple to understand, and true to its data base, but not theory that is obsessed with rigor. Second, the emphasis should be on the development of descriptive theory in the belief that sophisticated description in the hands of the practitioner is the best route to improved policy-making (1977, pp. 94–95).*

Three classes of variables need attention in research on strategy formulation: variables describing environmental conditions, variables relating to the persons making decisions, and variables relating directly to the colleges and universities as organizations.

Environmental conditions provide sources of opportunity and threat that the strategist must evaluate. Most concepts of the environment focus on degrees of certainty or uncertainty. Environments—which include economic trends, technologies, social values, and political changes—are seen as complex and rapidly changing or as stable and predictable. Cleveland (1981), Mintzberg (1973b), and Steiner and Miner (1977) illustrate ways to approach degrees of certainty.

The techniques of environmental scanning need to be tested. Probability-diffusion matrices, techniques for force-field analysis, value profiling, and multidimensional perceptional mapping are all techniques requiring refinement if strategic planners are to use them more effectively (see Cope 1981a).

The strategist as decision maker provides the link between the environment and the institution. The individual's cognitive mode or style of thinking needs study. Variables include characteristic methods of solving problems, tolerance for ambiguity, propensity for taking risk, capacity to think creatively, and intelligence. Closely related to the individual's cognitive mode or style is research on group processes.

Factors relating to the organization that may influence strategic planning include the position of the individual (trustee, president, dean, chair, faculty member), which may require different kinds of planning skills or orientations, and restraints on time and money, which have different influences on process and may result in quite different strategic decisions as well. Other variables include (1) power (Miller and Friesen 1978), (2) institutional properties, such as size or state of growth (Mintzberg 1973b) or structure (Kast and Rosenzwieg 1974); (3) status (public or private), (4) location, and (5) key elements of mission.

Integrated, interrelated research on strategic policy will thus look more closely at the environment, the structures and characteristics of colleges, and the intellectual requirements to think strategically.

If the three critical dimensions are not interrelated in single studies, separate, perhaps single-variable, studies need to address:

- the role of trustees in strategic planning
- the costs and benefits of strategic planning
- the information required for strategic analysis
- the content of effective organizational strategies
- approaches to organizing the strategic function
- the impact of changes in the political system on institutional policy.

## Techniques of Strategic Planning

The techniques essential to strategic planning, decision making, and management focus on the environment, on the institution, and on the links between the two. Table 3 illustrates the framework for this section. Management skills and techniques needed for the external orientation (the environment) include the capability to assess and affect the environment, which requires techniques to scan the environment as well as the marketing capability to affect the environment (the marketplace). Skills that focus on the institution (the internal orientation) include a capacity to review missions and programs and a knowledge of how individuals and groups process information to make strategic decisions. Finally, to integrate environment and institution, managers must consider what institutional elements need development to ensure long-term effectiveness and must know how to use comprehensive models to formulate strategic plans.

**Table 3: Managerial Skills and Techniques Needed for Strategic Planning**

| | Skills and Techniques | Key Literature |
|---|---|---|
| **External (Environment)** | Environmental scanning | Alm, Buhler-Miko, and Smith (1978)<br>Cope (1978, 1981a) |
| | Marketing | Kotler (1977, 1979)<br>Keim (1981)<br>Groff (1981c) |
| **Internal (Institution)** | Review of missions and programs | C.O.P.E. (1973)<br>Miller (1979)<br>Kells (1980) |
| | Cognitive skills | de Bono (1975)<br>Radford (1980)<br>Cleveland (1981) |
| **Integration of Environment and Institution** | Measures of effectiveness | Cameron (1978, 1981) |
| | Requirements for strategic planning | Alm, Buhler-Miko, and Smith (1978)<br>Hollowood (1979)<br>Cope (1978, 1981b) |

**Focus on the Environment**

**Environmental scanning.** Until the mid-1970s nearly all administrative and organizational theorists focused upon analyzing internal variables: costs per credit hour, salary differentials by rank, use of facilities, projected costs, and so on. More recently, however, institutional information systems are attempting to monitor various aspects of their environment as the institutions recognize that increased rates of change and indeed turbulent environments are critical to what happens to those internal variables. Just what dominant variables need to be monitored is still debatable, but it is clear that environmental scanning helps an institution make decisions about where to position resources so that it can benefit from trends, and, when used with marketing, have an advantage over the competition.

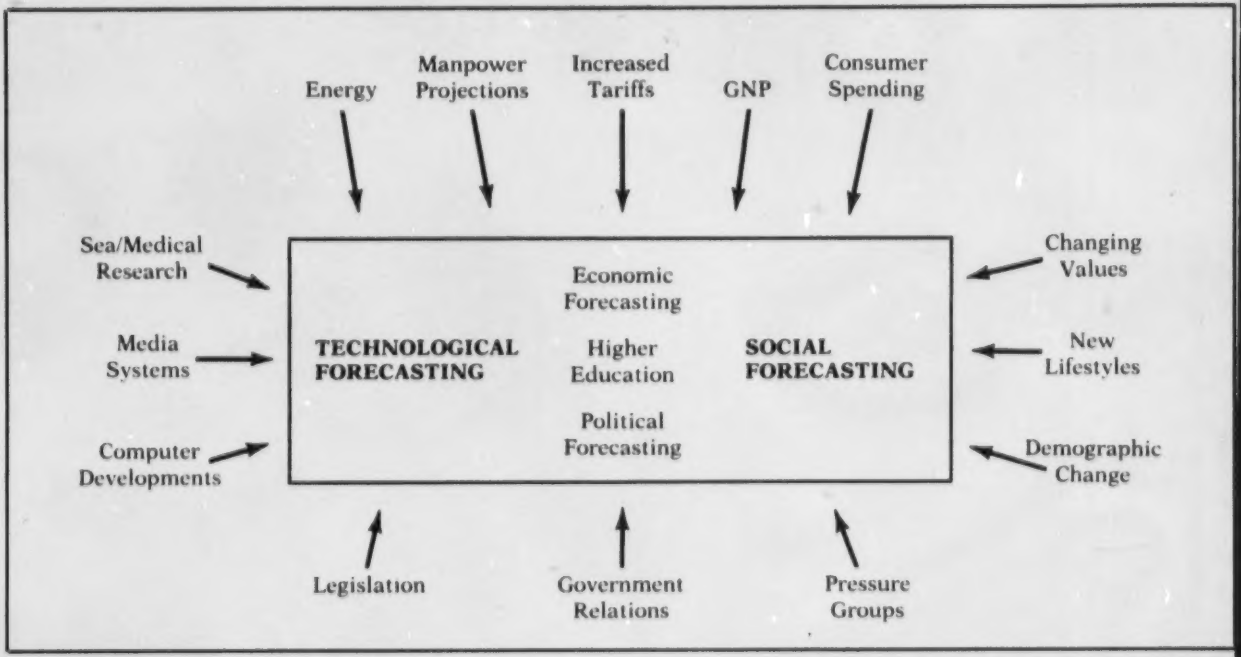
A commonly used general model for considering an institution's total environment has four dimensions: economic, social, technological, and—increasingly important—political (see Figure 2). Because public policy tends to change slowly and grows through the accumulation of individual events, an institution (through the office of institutional research, perhaps) might begin monitoring its environment simply by tracking carefully the new ideas that appear in the literature of higher education, keeping a careful record of those that seem to develop a following. For example, the reports of certain foundations; public statements of elected government officials, agency heads, and opinion leaders; budget requests of key legislative committees; developments in certain states and countries (California, Florida, Washington, Colorado, Connecticut, and Sweden) that tend to be harbingers of change; court decisions, particularly in the Supreme Court; publications such as the *Chronicle of Higher Education, Business Tomorrow, The Futurist, Change Magazine, Telescan,* and the *London Times Higher Education Supplement;* and addresses at national conferences are all important sources of information about future trends. An institution might want to categorize its literature reviews as does *Educational Administration Abstracts:*

- Automation, science, technology
- Economic development
- Government relations
- Human resources
- International relations
- Minority-group relations
- Population changes
- Social-class structure and mobility
- Urban and metropolitan affairs
- Values

The types of information that must be scanned are the results of substantial forces affecting the environment. They include:

- the emerging dominance of electronic information processing sys-

**Figure 2: Conceptual Representation of Environmental Cross-Impacts**




Source: Robert Cope, *Strategic Policy Planning: A Guide for College and University Administrators* (Littleton, Colorado: The Ireland Educational Corporation, 1978).

tems from video games to comprehensive systems in banks, schools, hospitals, even grocery store check-out stands

- the integration of information systems with production systems, dramatically changing the technical skills needed in factories
- the development of the automated office with microfiche, facsimile transmission, message routing by computer, and so on, all possibly furthering the stay-at-home office and the portable office
- the further introduction of advanced technologies such as video discs into education (Jamison and Warren 1980).

Scanning the 360° horizon for these kinds of information is likely to reveal a number of ill-defined "blips." But systematic monitoring of each blip will provide early warning of possible missiles as well as possible opportunities: social problems requiring action (e.g., disruptions in family life), major areas of community agitation (e.g., transport), major areas of scientific breakthrough (e.g., mini-computers), major areas of emerging social needs (e.g., aids for the elderly), major new opportunities in general (e.g., productivity), major areas for spending (e.g., energy alternatives), major educational opportunities (e.g., retraining). The point is that strategic planning requires continuous and comprehensive environmental scanning.

An institution can perform the task itself, or a group of institutions can cooperate. Probably the best example of cooperative, continuous monitoring is in the insurance industry. The Institute of Life Insurance in 1970 established a trend analysis program that monitors publications on the theory that ideas appear in print well before they start to produce changes in society. Individual insurance companies are assigned different publications to monitor for evidence of trends. The monitoring companies report regularly to the Institute, which synthesizes and shares the observations.

To apply the concept to higher education, cooperating institutions could monitor information, with a single institution responsible for summarizing the observations, say, twice a year. A national association could provide the same service. The American Association for Higher Education's Center for Learning and Telecommunications produces the bimonthly *Telescan* digest, which tracks developments and monitors the literature in telecommunications and higher education. That digest is clearly an environmental scanning service.

The most carefully worked out, still fledgling scheme for assessing future trends related to higher education has been worked out by the Resource Center for Planned Change of the American Association of State Colleges and Universities. A four-sided, cross-impact paradigm not unlike that in Figure 2 (the same principles apply) integrates national trends, local trends, values, and institutional sectors. (Institutional sectors refer to curricula, faculty, students, public service, and so on.) This is planning based upon the perspective of the decade ahead, or, as it is called, "planning from the future for the future" (Alm, Buhler-Miko, and Smith 1978; Buhler-Miko 1981). While this information scheme is useful for examining

probable future trends, the steps to formulate concrete strategic responses within the institution may need further testing.

An institution must work out its own categories for environmental scanning. For example, a women's liberal arts, church-related college might specify the need to examine changes occurring in the areas of energy, social-cultural interaction, genetic engineering, geopolitics, and demography. In turn, each area would be related to the specific religious community and to the specific church as well as to the usual concerns of any liberal arts college.

Knowing the difficulties inherent in forecasting population, one can guess that forecasting changes in socioeconomic, political, technological, or any other environment (no matter how well defined) can hardly be called an exact science. The information, once gathered, can be displayed in several forms to make it more useful, however. Two of the most useful techniques for higher education are probability-diffusion matrices and value profiles.

**The probability-diffusion matrix.** To predict developments over decades, it is useful to think of degrees of relative probability rather than of certainty or inevitability, for in the final analysis the assignment of a probability to a trend or future pattern of related events is a matter of judgment, albeit one based on weighing known data and cross-checking with expert opinion. Part, if not all, expert opinion can be supplied by the faculty on most campuses, as they are experts in their chosen fields.

Cross checking can be made more exacting by developing a probability-diffusion matrix (see Figure 3), in which predictions are stated along a probability axis so that their relative positions can be made apparent. Each prediction, once plotted, serves as the basis for asking "What if?" thus preparing the institution to think about contingencies.

It is also useful to assess the probable diffusion of a trend or pattern of events as it affects different populations the college serves. The same trends may have different impacts or no impact on different programs or different segments of the population the college serves. For example, a state fiscal crisis may wipe out an evening program with little effect on the day program. By plotting predictions along a diffusion axis, one makes explicit in more coordinated fashion the probability of particular events. The college can then choose to plan for some events (30-hour weeks) and not others (volcano eruptions).

When these two axes are combined, as shown in Figure 3, the user should gain a greater appreciation for interactive effects and internal consistency. For example, one college might see ways to capitalize on the relatively high probability of fresh-water crises, regional conflicts, and more government-business partnerships, while another capitalizes upon ways to link energy shortfalls and less traditional education. Each institution determines what is right in its given circumstances.

A variation of the cross-impact matrix that allows links directly to an institution's strategic emphasis is *force-field analysis* (see Figure 4), in

**Figure 3: Probability/Diffusion Matrix for Events and Trends Occurring in the United States and World by 1990**

| Low — Probability — High | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Thermo-nuclear war | | | | | | 8 + % inflation | | |
| | | | | | 30-hr. work week | | Minerals extracted from oceans | Rising levels of education |
| | | | Sky-trains across both oceans | | | Energy crises | Less traditional higher educ. | |
| | | | | | Third World relatively poorer | | | |
| | | | | Retirement at 55 | | | Multi-national unions | 3.5-5% unem-ployment |
| | Urban riots | | Ecological crises | | | More business-government partnerships | | |
| | | Strikes outlawed | | | Fresh water crises | | Localized solar heaters | $4,500 per capita income |
| | | | | | | Regional conflicts | | |

High — Diffusion — Low

Adapted from Ian H. Wilson, "Socio-Political Forecasting: A New Dimension to Strategic Planning," *Michigan Business Review*, July 1974, pp. 15–25.

**Figure 4: Force-Field Analysis**

| Forces → | Strategic Responses: Satellite Programming | Recruitment of Different Students | Faculty Development | Lifelong Learning |
|---|---|---|---|---|
| 85% tenured faculty → | | | X | |
| Trend toward older citizens in community → | | X | | X |
| Declining number of high school graduates → | | X | | |
| Declining state revenues → | X | | X | |
| Long-term residential growth occurring in open lands away from central campus → | X | | | |
| State and local push for accountability → | | | X | |
| Facility capacity underutilized in afternoon and evening → | | X | | X |
| New campus presidential style as innovator → | X | | | X |
| New types of industries → | | X | | |
| Many closed elementary school buildings → | X | | | |

Analysis of a community college force field.
Source: Robert Cope, *Strategic Policy Planning: A Guide for College and University Administrators* (Littleton, Colorado: The Ireland Educational Corporation, 1978).

which the institution identifies pressures (forces) and links them to its planned responses. For example, a community college's planning team recommends four strategic emphases: (1) develop satellite centers, (2) change student recruiting to emphasize a more heterogeneous mix, (3) start an in-house faculty redevelopment program, and (4) expand the lifelong learning programs. These emphases responded to certain "forces," as illustrated in the left margin of Figure 4. For example, the growing percentage of tenured faculty suggests the importance of a faculty development program, which in turn responds to projections of declining state revenues and pressures for even greater accountability.

**Value profiles.** A second device for displaying anticipated changes is the value profile (see Figure 5), which seeks to illustrate changes in sociopolitical value systems. Like the other approaches, this device should be viewed not as a precise measurement but merely as one more way to consider changes in the environment. The contrasting value dimensions on opposite ends of the chart (enhancement of one value suggests diminution of the other) tend to shift as each new generation responds to changing conditions with shifting attitudes. The changes should illustrate the value changes most likely to occur among the segments of the population each college serves or might serve.

This chart emphasizes value changes likely to occur in the segment of the population higher education had traditionally served—younger men and women coming from homes where there has been a tradition of higher education, of moderate affluence, and of commitment to new directions. These men and women might be considered the trend setters, the harbingers of change among other segments of the population.

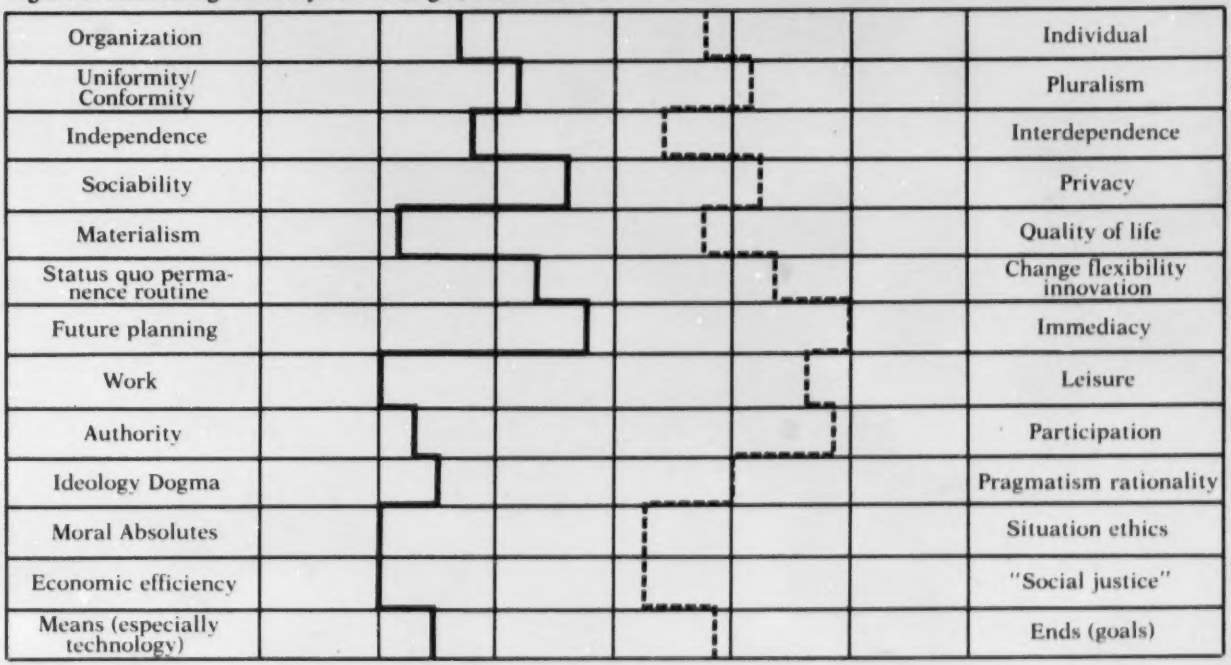
The chart shows two value profiles—present and near future. The present line represents the approximate balance struck by these trend setters in 1980; the future line represents the approximate balance expected in 1990. The approximate location of these balance points can be determined through a combination of survey research (using, for example, Likert Scales) and the Delphi Technique (using a panel of experts).

While environmental scans help institutions decide where to position resources—and are related to marketing—a more specific marketing technique is necessary for fully appreciating the environment. As the resources are placed in a competitive marketplace, the place of competing institutions must be assessed as well.

**Marketing.** Unfortunately, many in academe confuse the terms sales promotion, public relations, and marketing. Though related they are not the same. Marketing cannot attract students for long to offerings of poor quality. Marketing can, however, help to identify appropriate clientele, promote programs to that clientele, determine how to deliver programs, and evaluate the effectiveness of program offerings.

Marketing, as part of strategic planning, is intended to assist institutions in choosing the best match between what they can offer and the

**Figure 5: Estimating Value-System Changes, 1980–1990**




Adapted from: Ian H. Wilson, "Socio-Political Forecasting: A New Dimension to Strategic Planning," *Michigan Business Review*, July 1974, pp. 15–25.

needs of their constituents. Discussions of a marketing approach to product design and offering are available in numerous writings (Graff 1981b; Ireland et al. 1979–81; Kotler 1977; Keim 1981). This discussion focuses on four examples of marketing's influence on an institution's strategic position.

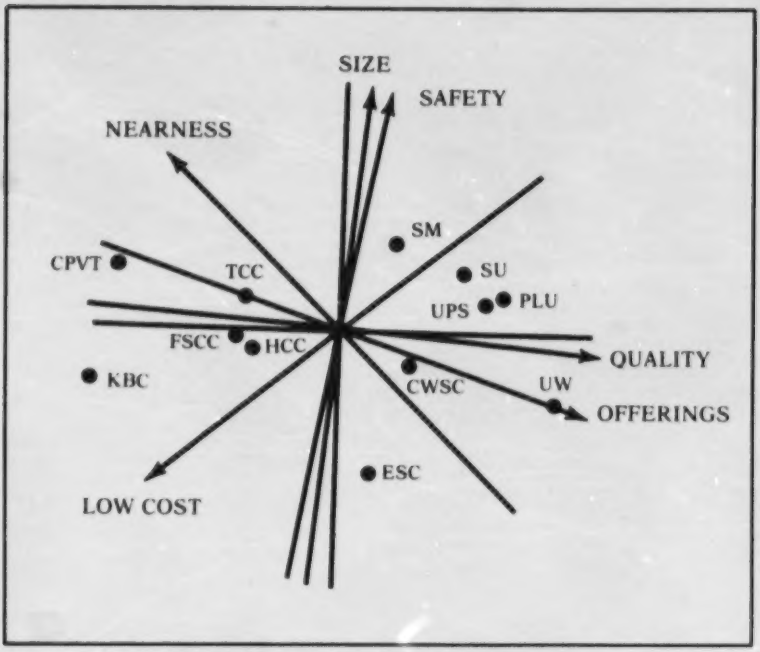
*The Pacific Northwest.* A study of 12 public and private colleges and universities in the Pacific Northwest demonstrates the concept of multidimensional scaling rather well (Leister 1975). The institutions included three public four-year schools, three community colleges, four private four-year schools, one high school with an active vocational-technical program, and one urban private secretarial-bookkeeping school. They are significant competitors, providing the range of educational offerings to potential students in the Puget Sound region.

The marketplace of each institution was found by asking samples of people to tell their perception of each institution for six dimensions: cost, nearness, size, safety, quality, and offerings. Through the statistical technique of multidimensional scaling, it is possible to construct aggregate multidimensional perceptual maps, a form of which is shown in Figure 6. Leister interpreted the figure as follows:

> *The University of Washington is viewed distinctly from the other institutions, but is closest to the other four-year state colleges. The four private, four-year schools are perceived to be in close proximity of one another, as are the three community colleges. At the far left of the figure are found the vocational-technical school and the secretarial-bookkeeping school. . . . [T]he figure demonstrates the wide perceptual differences that exist among institutions and types (public/private academic level) of institutions in competition with each other for the educational dollar in Western Washington. For example, psychological distance is greatest between the University of Washington (the largest single-campus university on the West Coast, with some 35,000 students) and the vocational-technical school. Many significant perceptual discriminations appear to exist between and among the twelve institutions. The careful observer will note even significant distinctions between institutions in the same general class, for example, among four-year public schools and among four-year private schools. For example, the educational innovativeness of Evergreen State College (an open-concept school where students "contract" with faculty members for individualized courses of instruction) appears to have been recognized by the distinctive position it holds in the perceptual space (p. 391).*

Multidimensional scalings with joint-space maps summarize a great deal of information that can be used in formulating strategy: clients' concerns are identified; the market position of competing institutions can be estimated; the important factors in determining position on the map are brought out; and the selection of a new position relative to the competition can be visualized. These vector maps "can be used as springboards for

**Figure 6: Joint-Space Map of Institutional Market**




Reprinted by permission from Douglas V. Leister, "Identifying Institutional Clientele: Applied Metamarketing in Higher Education Administration," *Journal of Higher Education* 46 (July/August 1975): 381–98, Figure 2.6. Copyright © 1975 by the Ohio State University Press. All rights reserved.

imagination regarding possible strategy alternatives . . ." (Leister 1975, p. 397).

*Boston University.* Boston University undoubtedly has one of the most difficult strategic positions in the country. It demonstrates what at least private college presidents know all too well: Institutions must compete successfully to live.

Concentrated in the Boston metropolitan area are nearly 60 colleges and universities, nearly 50 of which are private. About 80 percent of the college attendance in the area is in the private sector. Boston University, a major private institution (in terms of both overall size and the sizes of constituent colleges), lies in the middle of America's most college-intensive urban environment. North, across the Charles River, are the spires of Harvard and MIT; to the south is a five-square-mile plot virtually carpeted with community colleges, a state college, several private liberal arts colleges, business schools, and technical institutes.

Boston College is the quality institution for Boston's large Irish and Catholic populations. Brandeis is the impressive, richly intellectual, Jewish-sponsored liberal arts university. Northeastern University, the largest private institution in the country, sprawling and scattered over the Back Bay, dominates higher education's vocational-technical offerings. Tufts University is a smaller version of Boston University with an image of better quality, having its own coordinate college for women. And finally, there is a public newcomer, the University of Massachusetts at Boston, with a tuition level about one-fourth that of Boston University.

Boston University operates one of three independent medical schools in greater Boston, and the University of Massachusetts has started a fourth medical school in Worcester—a reminder that not only do institutions compete but their constituent units must compete as well for students and funds.

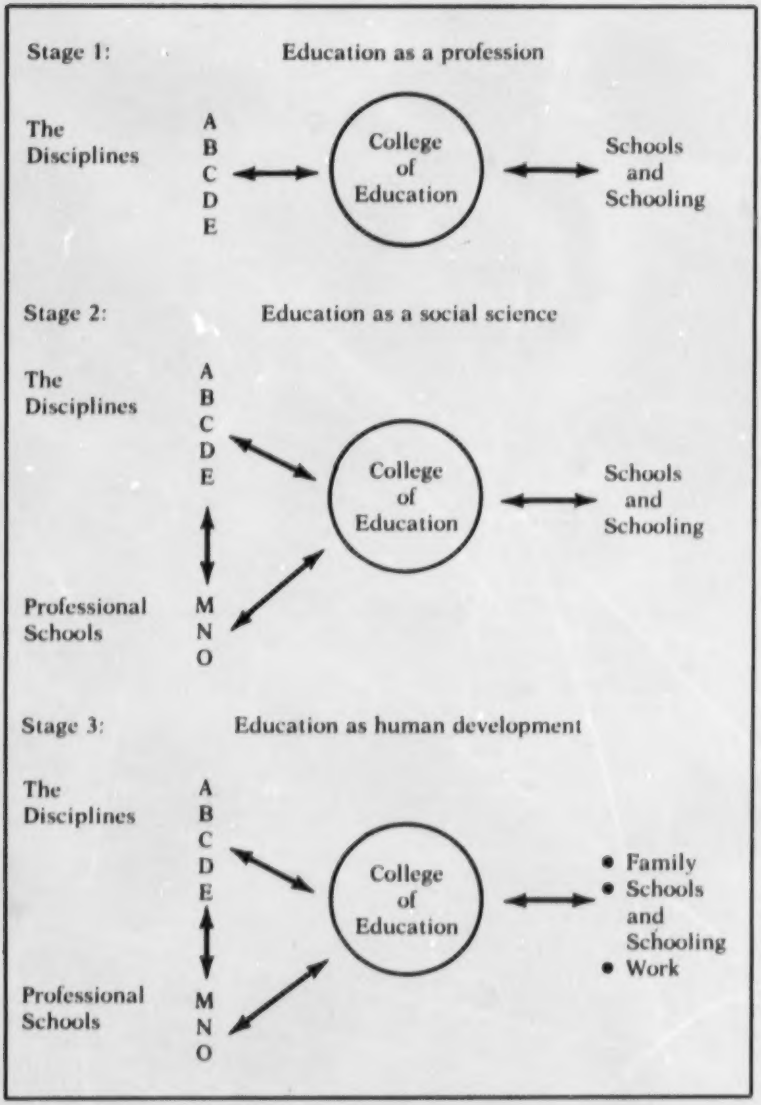
With all this competition, it seems that Boston University's strategy must be to continue to attract a growing proportion of its regular day students from out of state; already it targets many of its summer offerings to attract adults from other eastern and midwestern urban settings. This approach illustrates the positioning of resources to acquire resources.

*Rensselaer Polytechnic Institute.* Two parts of Rensselaer Polytechnic Institute's (RPI) current strategy illustrate positioning in two environments—geographical and technical—to expand its marketing flexibility. RPI has chosen three specific urban locations not in the northeast for intensive recruitment of students. These locations have significant numbers of alumni and major industries that use technologies taught at RPI. In addition, recognizing that the computer will be the basic tool of both researcher and engineer, RPI has greatly enhanced its computer capacity in all areas to aid in research and as a service to local industry. These strategic decisions place RPI in more direct competition with research-oriented graduate schools of engineering.

*A College of Education.* It is not necessary to think of other colleges and universities as the only competitors. An example of strategic thinking about a school of education's place in a large university illustrates how a shifting sense of purpose changes the emphasis given to intrainstitutional relationships. James Doi, dean of education at the University of Washington, presented a perspective of education that includes three stages of orientation: first as a profession, training the teacher; then as a social science, drawing more on traditional concepts of the various social sciences; and third as human development, serving lifelong processes and drawing on the biological as well as the social sciences. Figure 7 shows how a school of education's changing intra- and interorganizational relationships might initially be shaped by *ideas* in each of these three stages of development.

Environmental scanning, including an assessment of competing insti-

**Figure 7: Developing Orientations of a College of Education**



tutions, when employed as part of a planning process, offers interrelated benefits: help in identifying crucial issues, aid in formulating goals, an increased appreciation among operating units for how other units interact with each other and with their shared environment, and an enhanced style of thinking that becomes more open to opportunities. Some obvious impacts—as important as they are easily overlooked—include better communication and greater focus on direction.

Eventual success in planning strategically will depend first on an institution's capability to assess the social, the economic, the technological, and the political landscapes. And it will depend upon a capacity to deal with constituencies and officials outside the institution. For public institutions in particular, it will depend upon higher education's ability to obtain helpful legislation and to generate positive public opinion. Eventual success or failure now depends on a greater capacity to understand and manage the environment. As Edna St. Vincent Millay said, "There are no islands any more."

**Focus on the Institution**

**Review of missions and programs.** Mission is a primary institutional driving force and the element reviewed first in nearly every process of strategic planning.* The sense of the institution's mission serves to state what the institution believes in, what its major guidelines are, and in what direction it is moving. A statement of mission should report what the institution has been (its heritage), what it shall become (its destiny), and what it does *not* believe itself to be. Too often mission statements are too general, intended to be inspirational, set a "tone," or, usually by a department, seek to earn a position as "one of the ten most respected . . ." None provides any specific guides for action by staff members.

An effective mission statement should include the following nine elements:

- a sense of heritage
- a statement of fundamental purpose
- a declaration of emphasis on: teaching or research or service; graduate or undergraduate programs; liberal arts or vocational programs; traditional or nontraditional programs
- a statement of educational philosophy
- a statement of the range of disciplinary offerings
- a position to serve certain constituencies
- a position on community service obligations
- a statement on management and governance
- an observation on the geographic zones of commitment.

*This section on review of missions and programs benefits greatly from draft documents and discussions at the National Center for Higher Education Management Systems. Robert Barak, Kent Caruthers, Douglas Collier, and Robert Shirley all contributed to this section.

Probably most important, the mission statement should also say what is and what is to be included in five areas: basic philosophy and values, goals and objectives, clientele, program mix, and geographic service area.

Perhaps the most pointed question that should be asked is, For whom does the college or department exist? To whom, besides the faculty and staff, would it make a difference if the college or department ceased to exist? These pointed questions are also linked to program review.

It is somewhat difficult to define "program." Often a program is simply an academic department, but it could also be part of a department or could cut across organizational lines. Several criteria will help decide which units constitute a program:

1. The program must have its own mission, largely distinctive, quite independent of the missions of other programs.
2. The program must be able to compete in the external environment for students, faculty, and funds.
3. The program must have a large measure of operational independence and therefore be able to make discretionary purchases, schedule the work of the program (classes, teaching, leaves), and be able to create, within appropriate guidelines, new "products," i.e., new curricular offerings, new research programs, new forms of public service.

Other considerations include the necessity to be self-sustaining (therefore size is important), to have separable costs and revenues, to be able to accomplish its own integrated planning in relation to its constituencies, markets, facilities, staff deployment, and organizational arrangements, relatively independently of other programs.

Colleges and universities have reviewed programs to ensure *minimum* standards of quality. These reviews are typically carried out regularly, every five or ten years, and customarily are conducted by a team of faculty from other departments with a visiting team of respected faculty evaluators in the same field. They are essentially self-assessments of competency.

The focus of strategic planning asks some of the same questions about competency yet goes farther to ask whether the program has any distinctive competencies that can be built upon; the strategic focus also places more weight on the fit of the program with other programs that are in keeping with the mission. Questions about distinctive competencies force an examination of programs outside the institution (the competition), and questions about fit require views across the campus (possible collaborative arrangements); thus program review as part of strategic planning seeks an integrated inside/outside look at strengths and weaknesses.

Strategic planning requires that only four variables be examined when program reviews are linked to budgets: quality, centrality, comparative advantage, and demand (Cope 1981b). The four variables are based directly upon the requirements for program review of the Committee on Program Evaluation of the University of Illinois (C.O.P.E. 1973) and ac-

commodate the guidelines for program review of Kells (1980), Melchiori (1981), and Miller (1979).

*Quality* consists of the usual evaluations of performance in teaching, research, and service, as well as an assessment of the quality of students, measured both upon entry and by their performance after completion of a program of study.

*Centrality* is perhaps the most important variable, because it measures the extent to which the program is central to the objectives and role of the institution. For example, the liberal arts are central because of their supportive relationship to other programs even in an otherwise research-oriented university. Similarly, accounting is central to a business school, and curriculum studies are central in a school of education. The services provided by any program are another measure of its centrality. Service may consist of assistance to other academic units on campus, to administrative units, and to public agencies. (The appendix contains a test for centrality.)

*Comparative advantage* is an assessment of the location, size, and number of such programs in a metropolitan district, state, region, or nation. It is also based upon a distinctive approach or upon a unique demographic, industrial, geographic, or cultural attribute of the area served.

*Demand* is an assessment of the number of students applying for admission as well as an assessment of the credit generated elsewhere from the program's own students. This variable recognizes whether short-term or long-term demands are growing, stable, or decreasing.

An examination of these four variables should lead to two largely separate decisions (see Table 4). The first involves the continuation of the program, either as is or in a modified form; the second involves future funding. The primary consideration in the decision to continue a program is its centrality; referring to the range of activities that must be represented in some degree at the institution. Program A, for example, represents the best of all possible worlds: high quality, high centrality, a clear comparative advantage, and high demand. This program should not only continue but should also receive greater-than-average budget allotments. The analysis of hypothetical Program H suggests the importance of centrality. Even with low quality, because of the program's high centrality it must have investments for improvements regardless of comparative advantage or demand. Centrality is the dominant variable, because it relates to the essence of the institution's purpose. Program I illustrates a high quality program with high demand but of marginal importance to the institution's mission. The program might be reorganized to increase its centrality and maintained at an average level of budget allocations because competing programs are certain to develop.

The hard decision in program review is determining what programs should be eliminated, a question that looms larger in the 1980s. When the focus is on strategic planning, however, the decision becomes somewhat easier. The important questions are less about satisfactory program performance and more about future fit. The key questions become, How im-

**Table 4: A Decision Table for Reviewing Programs**

| | *Institutional View* | | | *Strategic View* | | |
|---|---|---|---|---|---|---|
| Program | Quality | Centrality | Decision on Continuation | Comparative Advantage | Demand | Decision on Budget |
| A | High | High | Yes | Clear | High | Invest more |
| B | High | High | Yes | Clear | Moderate | Maintain |
| C | High | High | Yes | Clear | Low | Maintain |
| D | High | High | Yes | Some | High | Invest more |
| E | High | High | Yes | Little | High | Maintain |
| F | High | High | Yes | Little | Moderate | Maintain |
| G | High | High | Yes | Little | Low | Reduce |
| H | Low | High | Yes | None | Low | Invest to improve |
| I | High | Low | Reorganize | Little | High | Maintain |
| X | Moderate | Moderate | Discontinue regardless of comparative advantage or demand | | | |
| Z | Low | Low | | | | |

Adapted from Robert Cope, *A Shared Management Model for Program Evaluation Using the Strategic Planning Concept* (Seattle: University of Washington, February 1981).

portant is this program to the mission of the institution? and How important is it to your program?

Perhaps the most comprehensive and useful set of criteria already widely used in program review came out of the experience of the State University of New York at Buffalo, during the mid-1970s, when the campus had to drop programs after a series of severe budget cuts. The Academic Planning Committee, guided by statements of mission, established quality, need, and promise as three criteria for determining priorities. These three criteria were supported by seven other, more detailed criteria:

1. need for the program: student demand (taking into account programs in which certain courses are required and programs in which this is not the case), graduate employability, importance for this campus's profile, importance for SUNY's profile, the support it provides to other programs
2. type of clientele served: minorities and women (especially at the graduate level), preprofessional, professional, general education, continuing education
3. quality of program: external evaluations (including accreditation ratings), student quality (particularly at the graduate-professional level), faculty quality (including individual and overall productivity, creativity, or innovation)
4. public service activities related to program mission: professional association activities of major visibility, consultation with public and business firms, public lecturing, and so on
5. participation in multidisciplinary programs: unit participation in or affiliation with colleges, centers, and institutes on this or other campuses
6. program efficiency: program profile data, as described, unnecessary course offerings, ability of program to monitor and evaluate its own activities
7. resource needs: requirements to maintain or bring the program more in line with priorities given to it (Miller 1979).

Other major efforts to review academic programs are at the University of Illinois (C.O.P.E. 1973 and continuing reports) and at Ohio State University (Arns and Poland 1980).

A plan emerging from such reviews, to be "strategic," must identify collaborators within the campus and describe the nature of the collaboration (synergy). It must clearly define the position of competing programs (outside the institution and sometimes within) and indicate how that competition shall take place. It must ask, What clients will fund research? What relationship will exist between instruction and public service? What long-term issues of public interest will be influenced? What special efforts to attract appropriate students will be undertaken? Questions such as these shift the focus of program review from simply an assessment of academic quality to an overall evaluation more consistent with giving the

program a recognized place in its two environments—inside and outside the institution. This process is *strategic evaluation.*

**Cognitive and group skills.** Making strategic decisions calls upon particular mental and group process skills. The approaches to strategic thinking range along a continuum from formal and quite analytical to nonanalytical, from very analytic to intuitive (Cleveland 1981). They complement each other:

> *In a fundamental sense, formal planning is an effort to replicate intuitive planning. But formal planning cannot be really effective unless managers at all levels inject their judgments and intuition into the planning process (Steiner and Miner 1977, p. 150).*

The conceptual ability stressed in strategic planning—especially for institutions with multiple goals and many constituencies using unclear technologies, often in highly complex, politicized environments—must be, to a considerable extent, holistic, intuitive, and gestalt, because the mind must sort and weigh so many broad, intertwined variables simultaneously. The need for fresh insights demands that mental processes be creative. It is possible to structure group processes to enhance creativity and to increase the probability of the broadest conceptual thinking, freeing the mind from habitual solutions (Prince 1972; de Bono 1975; Ackoff 1978; Cope 1978, 1980; Buhler-Miko 1981).

Strategic planning, then, integrates not only an institution and its *external* environment but also analytic with intuitive mental processes. In keeping with an idealized learning community, it should also provide for participative group processes that contribute to the quality of an institution's *internal* environment.

> *By participating in the planning process, faculty and administrative teams gain a much clearer understanding of their institution. They know a great deal more about the present as well as the future status of the plan, the hidden values and purposes of each sector of the institution, the kinds of students they have, and the forces at work for and against the college (Buhler-Miko 1981, p. 38).*

Participation and freer thinking are enhanced by introducing "impossible" ideas into problem solving and planning. For example, if the matter is about how community education courses can be made more efficient, a planner might suggest the "impossible": All services must be offered by an agency other than the college. Fresh ideas are stimulated. The idea is to introduce outrageous possibilities to stimulate productive, innovative possibilities. Anything is a possible stimulant. Keep the unthinkable related to planning in the institution's environment: Sell half the academic programs to the locale's largest employer; open seven new campuses next year; take over a small college three states away; and so on.

Another way to enhance creative problem solving is to use a random concept to spark new associations. Asking, How can community education services be offered more efficiently?, a group might open a thesaurus at random and find, say, the word "courage." They would find such synonyms as bravery, valor, intrepidity, dash, self-reliance, spunk, and bold stroke, and such adjectives as heart-of-oak, intrepid, plucky, audacious, and spirited. Dash? Could advertising be changed to have more dash and thus attract more attention? Spirited? Could an effort be made to offer more spirited instruction to adults who have worked all day? Self-reliance? Could community education emphasize courses on self-reliance?

The strategic planning team will need all the writing space that can be provided—pads, chalkboards, flip charts, butcher paper. This also suggests the importance of the meeting place. The room itself should be in a neutral setting, away from the trappings of central administration, faculty, or student life. The participants should sit at a round, rather than a square or rectangular, table. Everything possible should be done to create an atmosphere free of pressures leading to conformity. Individuals should be free to experiment, to build on each others' ideas, and to be wrong.

The new ideas need to be examined further (Moore 1975). At several colleges, new ideas generated by group processes are effectively carried toward implementation by advocacy task teams appointed by campus presidents. A bottom-up process must have a method of implementation at the top, where the president plays a key role. "The president is the formal, full-time link between campus and society" (Millett 1978, p. 268) and may be considered the ultimate "architect of strategy" (Cope 1978, p. 6).

**Integration of Environment and Institution**

**Measures of effectiveness.** Drucker (1974) urged attention to organizational effectiveness rather than to efficiency: Doing the right thing is more important than doing things right. The question for colleges and universities is, What right things shall the strategic efforts emphasize? Those in higher education have attempted to answer this question primarily through program review. Program review asks, What is done well?, but it focuses almost exclusively on the internal. The emphasis is on the quality of degree programs determined by assessing how good the teaching is, how much evidence there is of scholarly productivity, and how much service is provided. Effectiveness in higher education, in keeping with strategic planning, requires more *balance*—balance between external evidence of effectiveness and internal evidence of performance.

Cameron (1978, 1981) has most systematically reviewed measures of effectiveness and has twice tested nine dimensions for construct validity: student educational satisfaction, student academic development, student career development, student personal development, faculty and administrator employment satisfaction, professional development and quality of the faculty, system openness and community interaction, ability to acquire resources, and organizational health. Some of these dimensions

are more clearly internal—thus less strategic; others are clearly external—thus strategic. Eventually his research should help institutions identify the major variables ensuring effectiveness, in the sense of their capacity to ensure the fullfillment of mission. Some of those major dimensions may be internal, others external, some a combination.

The earlier effort of the Educational Testing Service to determine what accounts for institutional vitality, resulting in the development of the Institutional Functioning Inventory (IFI), also provides guidelines for determining effectiveness (Peterson et al. 1970). The 11 IFI dimensions are:

1. *intellectual-aesthetic extracurricular:* the extent to which activities and opportunities for intellectual and aesthetic stimulation are available outside the classroom
2. *freedom:* the extent of academic freedom for faculty and students as well as freedom in their personal lives for all individuals in the campus community
3. *human diversity:* the degree to which the faculty and student body are heterogeneous in their backgrounds and present attitudes
4. *concern for improvement of society:* the desire among people at the institution to apply their knowledge and skills in solving social problems and prompting social change in America
5. *concern for undergraduate learning:* the degree to which the college—in its structure, function, and professional commitment of faculty—emphasizes undergraduate teaching and learning
6. *democratic governance:* the extent to which individuals in the campus community who are directly affected by a decision have the opportunity to participate in making the decision
7. *meeting local needs:* the extent to which the institution emphasizes providing educational and cultural opportunities for all adults in the surrounding communities
8. *self-study and planning:* the importance college leaders attach to continuous long-range planning for the total institution and to institutional research needed in formulating and revising plans
9. *concern for advancing knowledge:* the degree to which the institution—in its structure, function, and professional commitment of faculty—emphasizes research and scholarship aimed at extending the scope of human knowledge
10. *concern for innovation:* the strength of institutional commitment to experimentation with new ideas for educational practice
11. *institutional esprit:* the level of morale and sense of shared purposes among faculty and administrators.

Comparing Cameron's and Peterson's dimensions shows little obvious relationship, illustrating at least the lack of conceptual clarity among measures of institutional effectiveness or vitality; more importantly, however, it reveals that the underlying assumptions might be quite different. Cameron starts with concepts of the functioning organization, while

Peterson starts with ideas about what colleges should be. Peterson's inventory is not so much of functions or even characteristics that provide for effectiveness in acquiring resources (the ultimate test of survival) but is rather a list of expressions of time-honored values: freedom, human diversity, democratic governance, and so on.

A third effort is attempting to link significant organizational, geopolitical, and marketing elements to a Darwinistic conceptualization (Cope 1981c). Six elements are proposed. Three provide competitive advantage, three adaptability. To provide competitive advantage, effective institutions must have productive centers of distinctive strength with internal and external links, pivotal locations (geographic, technological, and value oriented), and quality programs. To provide adaptive capacity, effective institutions must have permeable boundaries related to segmented markets, a preponderance of staff employed in adaptive substructures, and executive-level encouragement to develop new programs.

As Table 5 illustrates, comparison of these six elements with elements in several other studies of effectiveness strongly suggests three elements that are needed for an effective institution: quality programs, executive encouragement, and centers with links. The reader is cautioned, however, that "the analysis is tentative and speculative, intended more to stimulate the imagination than to prove anything" (Cope 1981c, p. 4). This is an attempt, however, to find fundamental and simplified objectives for the formulation of strategy.

A fourth project measuring effectiveness is underway under the direction of the American Council on Education's Higher Education Management Institute (ACE/HEMI). Its long-term program of research on managerial functioning and effectiveness in higher education has so far resulted in a review of the literature (HEMI 1981). Subsequent research is expected to yield a model for measuring effectiveness.

While the existing literature on effectiveness of institutions is still formative, it nevertheless is important because it provides both direction and measurement: direction toward what strategic management should emphasize and measurement of outcomes.

**The requirements for strategic planning.** To actually plan strategically, the institution must have a system, a plan for planning. Advocates of strategic planning arrange the steps in the process differently, but the basic elements remain the same:

1. Review the mission, role, and scope of the institution, college, department.
2. Gather data on the internal operations, especially their strengths and weaknesses.
3. Gather data on the external environment, especially threats and opportunities.
4. Match the mission with the strengths in ways that capitalize on the opportunities to develop alternative formulations of strategic policy.

**Table 5: Agreement of Dimensions across Studies of Effectiveness**

| Characteristics of Natural Systems | | | | | |
|---|---|---|---|---|---|
| *Competitive Advantage* | | | *Adaptive Capacity* | | |
| Centers with Links | Pivotal Locations | Quality Programs | Permeable Boundaries | Adaptive Substructures | Executive Encouragement |
| Mott | C.O.P.E. | Peters | Peters | Mott | Peters |
| Peters | | C.O.P.E. | Cameron | Peterson | Park |
| C.O.P.E. | | Cameron | | Park | Cameron |
| Park | | Park | | Ouchi | Peterson* |
| | | Ouchi | | | Ouchi |

*In Peterson's work, both "meeting local needs" and "concern for innovation" appear to resemble executive encouragement of new products.

5. Choose from among the alternatives those strategies that are consistent with the institution's values, economically justifiable, politically attainable, and consistent with serving important social needs.

It must be observed that strategic planning does not require much, if any, significant change in what colleges and universities do already. Most techniques are already in use at most institutions: Environments are scanned, programs are reviewed, budgets are linked to future intentions, groups come together to make decisions, effectiveness is sought along with the efficient use of resources, markets are studied, and so on. With strategic planning, the use of techniques, the terms applied, and the data sought might be somewhat different, but they are essentially the same as in current practice.

What is different then? Consolidation of programs is more important. Clearly identifying the links among programs is more important. Newer directions are given greater attention. Identifying competing institutions and figuring out how to allow each an appropriate niche is part of the analysis. One major difference is that the skills and techniques discussed in this section—environmental scanning, marketing, review of missions and programs, cognitive skills, measures of effectiveness, and requirements for strategic planning—are emphasized in the process. And those emphases shift, as illustrated in Table 1. More attention is given to the environment and to what Marchese calls the "direction of travel":

> *The relevant discipline is history. You ask, what were we like five years ago, and what are we like today? If that direction of travel were maintained, what would we look like five years from now? Do we want to look like that? If not, what interventions can we institute now so that five years hence we'll look like what we choose to look like? Along the way, one might look anew at the mass of data accumulated on institutional shelves; data about finance, student characteristics, curricular choice, faculty composition, energy consumption, financial aid, or whatever. The idea is to take what you have and think imaginatively about it (1981, p. 4).*

Determining direction(s) of travel, then, results from a process not unlike present planning. Given the financial climate that is likely to be present for the remainder of the century, however, a process of muddling through (Lindblom 1959) no longer seems warranted.

While colleges and universities will plan in different ways, certain elements in the process are essential: that the application be multilevel, that actual decision making be a brief process, that strategic plans be differentiated according to function. First, the process must be applied on at least three levels: (1) the institutional level, where the primary emphasis is on how to relate total institutional resources to the needs of society; (2) the coordinating level (a college or a department, for example), where the primary emphasis is on the coordination among departments (or colleges); and (3) the program level, where the delivery of instruction, re-

search, and service takes place and where the primary emphasis is upon creating and delivering quality "products" (Cope 1981b, Millett 1978).

A fourth level of strategy is also possible: the level of implementation. What strategy will attract a target clientele? What changes in curriculum are necessary? What redistribution of funds is appropriate? (Shirley 1981a)

"Bottoms up" planning involves the staff as "directions of travel" are evaluated (Marchese 1981; Cope 1980).

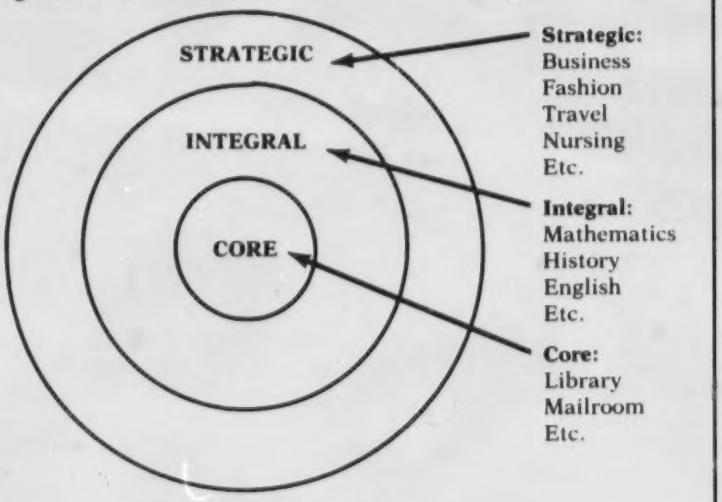
> *Instead of a "top down" one might consider a "bottom up" approach: that is, evolving mission/goals statements from a careful reading of what people and organizational units believe and do. ETS's Institutional Goals Inventory helps with such an approach. Another approach, more apt for the large university, entails having each organizational unit (the School of Public Health, the College of Education, etc.) develop a mission statement, rationalizing them, then using these as data for a composite statement for the institution as a whole. A variant on this approach would entail starting not with existing organizational units but with organizational functions (instruction, research, public service, academic support, student services, and institution support are the six "functions," for example, in the NCHEMS program classification structure). The basic idea in each of these "bottom up" approaches is that mission emerges from a formal, coordinated attempt to understand and articulate the operational nature of the institution . . . [thus] one seeks to get beyond aspirations to the reality of institutional life (Marchese 1981, p. 4).*

A second suggestion is to keep the decision-making process brief. All of the planning literature assumes that a substantial amount of research (gathering data) is required before strategic decisions are made—otherwise, the process is one of muddling through. A long process is unnecessary because faculty and administrators, who have a great deal of knowledge about the institution and what is happening in its environment, can make sound and imaginative, yet *tentative*, judgments about appropriate directions in a matter of hours.

"Tentative" is stressed because any process should present opportunities for sharing ideas at the institutional, coordinating, and program levels. These tentative ideas need to be shared widely, horizontally and vertically, for review and comment. The business college or department needs to share ideas with, say, the education department, just as the physics and chemistry departments need to critique each other. Several phases of review and comment are necessary for adequate communication, collaboration, negotiation, and influence.

The simplest process would have department faculty or the staff of a support unit meet in the morning to explore suggestions about what would make a great department. In the afternoon, the group would explore ideas about how to make it great. Advocates of particular positions would then be organized into task groups to work out the details, always sharing developing ideas with other segments of the institution.

**Figure 8: The Fritz Model**




A slightly more detailed process, but still manageable in one day, would have groups systematically scan the environment, using maps and economic and demographic data to spot opportunities. Institutional strengths are assessed separately. The strengths are then linked to the opportunities to determine the directions that appear most viable (Cope 1980).

The final requirement for an initial analysis of strategy is differentiation according to the nature of the function or program. A major corporation, for example, maintains two- to three-year strategic plans for its toy division, two-year (maximum) directional plans for its fashion division, and five- to six-year plans for its food division.

An approach recognizing different functions advocated by the planning committee at Columbia (Missouri) College, referred to here as the Fritz Model, after its inventor, sees all departments and functions fitting three modes: strategic, integral, and core (see Figure 8). Strategic programs have a direct link to environments beyond the institution. Schools of business administration, travel, and fashion design are strategic because of the continually changing demands made upon them by their industries. Integral programs are necessary for a complete education. The mathematics, English, and psychology departments are essential in a liberal arts college and are necessary supporting programs for professional degrees. Core functions are indispensable: library, learning resource center, and mailroom, for example.

The logic of the Fritz Model suggests that strategic programs justify their changing requirements for funds on the changes in their client in-

dustries. Integral programs, because their base of knowledge and demands change less rapidly, justify their need more on the basis of how they support the strategic programs. Core functions are justified on the basis of services to integral and strategic programs. The logic of the model also suggests longer-range plans can be made for core functions and shorter-range plans made for strategic programs.

**Summary.** The strategic planning process in any institution may vary considerably in timing, intensity, steps, extent of data, degree of involvement, and so on. Whatever the differences, however, three dimensions are involved: time, vertical integration, and horizontal integration. In addition to the obvious requirement of time, strategic planning involves hierarchical levels in the institution, perhaps from the bottom up, and horizontal considerations that recognize distinctions in program functions. Strategic planning is the ultimate matrix game, in three dimensions.

## Summary

### Qualities of Strategic Planning

The strategic view has gained a following today because people are increasingly realizing that environments change, that planning is a process, and that competitors are changing tactics. One of the qualities of strategic thinking, therefore, is an *emphasis on change*. A related quality is recognizing that the planning process is dynamic rather than static. Plans are not made then implemented; plans rather are continually modified. Strategic plans become a pattern in a stream of decisions (Mintzberg 1978).

This form of planning is likewise more iterative, relying more on a learning process as individuals study the changing environment and the institution's responses. "The strategic process suggests adjustment, adaptation and perhaps incrementalism" (Carter 1980, pp. 101–2). Even if planning, allocating, and monitoring are done on a scheduled, cyclical basis, there is a growing appreciation for the importance of problems, ideas, and opportunities that do not fit that arranged timetable.

Because many, perhaps most, of the problems, ideas, and opportunities occur in the external environment, planning today is increasingly influenced by events there. And those events, for both public and private higher education, are more often occurring in the political realm. More of today's strategic management is therefore seen as the management of politics.

The strategic view is also one of humility. The growing awareness of uncertainties, our incomplete knowledge, and our limited capacity to understand when so much is in flux demand it (Amara 1979). "It would seem that the humble attitude also derives from what we *do* know—regarding the limits in our ability to change the environment and the ever-present need to justify [our social responsibility] . . ." (Carter 1980, p. 102).

Strategic planning is a process that is hierarchical and intrainstitutional, consisting of both broad and narrow purposes. The levels and different segments need to interact, recognizing that all levels and segments have a legitimate place in planning processes.

The essence of strategic planning remains the matching of internal resources (values, programs, facilities, staff) with opportunities to both serve and advance the social good. Mission is advanced through the focusing of goals and objectives as personal efforts are directed by strategies.

Finally, strategic planning is a philosophy, an attitude, an approach, and a way of thinking. It is trained and organized common sense. It seeks communication as much as the allocation of resources. It is a creative process, valuing flexibility and innovation, seeking synergistic strengths.

### From Strategic to Open-System Planning

Rather than "strategic planning," those in higher education should adopt a new expression, one more in keeping with the values of academe: "open-system planning." Because it emerged largely from military usage and suggests the deployment of forces to defeat an enemy, the term "strategy" carries the unfortunate connotation of deception. Strategy suggests beating the competition, perhaps even trickery. It suggests the importance of keeping secrets, lest "they" know what we are planning.

Open-system planning, on the other hand, recognizes the need for the open involvement of many constituencies as intentions are formulated. Externally, they are legislative and executive bodies, alumni, citizens of the immediate community, church groups, industrial and artistic interests, "cause" groups, prospective students, and other educational, service, and cultural institutions. Internally, they include students, faculty, staff, administrators, and trustees. Most institutions already recognize and include these many interests as directions for the future are formulated. The boundaries around our institutions are permeable. Perhaps if we choose to call it open-system planning, we will further expectations for widespread and active involvement, leading to delicate adjustments of thought that are necessary for successful adaptation of ideas.

## Appendix

**A Survey Form to Obtain Responses to a Question About the Importance of Particular Programs or Activities**

How important is *complete with an appropriate identifier (an activity or program)?*

To your *individual** teaching and scholarship

| High Importance | Moderate Importance | Low or None |
|---|---|---|
| ☐ | ☐ | ☐ |

To your *department's* teaching and research

| Essential | Moderate Importance | None |
|---|---|---|
| ☐ | ☐ | ☐ |

To the *college's* role and functions

| Essential | Moderate Importance | None |
|---|---|---|
| ☐ | ☐ | ☐ |

*The categories can go on to university, state, region, nation, and so on. Respondents might evaluate the importance of many programs or activities.

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